Perceptions of Armed Policing: Barriers and motivations to becoming an Authorised Firearms Officer

by

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Abstract

Police constabularies in England and Wales are under increased scrutiny to ensure diversity and representation across all aspects of policing business. Armed policing, however, has historically been understood as an exclusive, highly masculine and dangerous enterprise. This research examined police officers' perceptions of the motivations and barriers to becoming and Authorised Firearms Officer (AFO). Based on a survey of 287 respondents, this research found that there was little difference between males and females on the value placed on gendered nature and aspects of the AFO role. However, findings also reveal enduring perceptions of firearms units are inaccessible, the work characterised in terms of threat, risk and dangerousness. For many underrepresented groups therefore, this leads to a sense of feeling unwelcome in firearms units. In order to improve perceptions of firearms as a policing activity, and the diversity within firearms units, police constabularies should seek to ensure that these units improve accessibility and inclusivity in addition to being cognisant of the impact that culture continues to have on the ability to recruit.

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Chapter One: Introduction

Policing in England and Wales has a celebrated history of being unarmed. The Peelian Principles firmly cements the doctrine of minimal force as central to the British model of policing. Consequently, the arming of police officers is a source of controversy, yet despite the conflicting and often emotive views, the firearms specialism continues to attract interest from new recruits. A career in policing offers a variety of specialisms including neighbourhood, investigations, intelligence, surveillance, public order and safeguarding (College of Policing, 2017). Specialist roles are available to police officers after successful completion of the two-year probation period. Set against other specialist roles, armed policing presents distinct opportunities and challenges, which may act as motivator or barrier for the new recruit (Squires and Kennison, 2010).

Drawing upon existing literature and a survey of serving armed and unarmed police officers this research explores the motivations and barriers to becoming an Authorised Firearms Officer (AFO). Through an exploration of the perceptions of armed policing and career ambitions, this research will offer an insight into police officer's decision making in order to inform recruitment, development and retention of the specialism.

History of armed policing in Great Britain

Routinely unarmed policing

Policing in England and Wales has operated as a largely unarmed service for almost two hundred years, despite having always having had access to firearms and other weapons (Miller,1977; Waldren,2007). Public support for routine arming typically increases following the death or serious assault of unarmed police officers. Whilst the Peelian Principle of 'the police are the public and the public are the police' continues to shape contemporary policing, the introduction of the Metropolitan Police created tension amongst some citizens of London. In 1830, Constable Berry

was shot and stabbed while attempting to detain two burglars which led to one of the earliest calls for police to be armed (Ingelton, 1997: 37).

Developments in armed policing

This section will document the changes in armed policing to provide the operational and political context to key decisions relating to armed policing. By situating the research in context of the development of armed policing, it is intended that an understanding of the development of the police provides an insight into the challenges of armed policing in the consensual British policing environment.

The Shepherds Bush Murders

In 1966 Harry Roberts, a convicted armed robber who had recently been released from prison, was in a car in Shepherds Bush, London with driver John Witney and passenger John Duddy. Police officers, Detective Sergeant Christopher Head, Temporary Detective Constable David Wombwell and Police Constable Geoffrey Fox, were engaged in routine crime patrols in an unmarked police car nearby. David Wombwell walked over to car and was shot in the face by Roberts, who then went on to shoot Christopher Head whilst Duddy shot Geoffrey Fox. These events, and the subsequent manhunt for Roberts, would force British policing to review its capability in responding to serious incidents necessitating the police use of firearms. These events marked a significant change to armed operations in response to armed and dangerous criminals (Waddington,1991).

The Professionalisation and Growth of Armed Policing

The late 1960s marked the end of what Punch (2011) terms the 'hazardous amateurism' of the police use of firearms and saw the establishment of the Metropolitan Police Force Firearms Unit, later known as 'D11'. The role of D11 was to train officers who needed to carry firearms and provide specialist support to operations. The first formal training course for the Metropolitan Police was in 1967, with sniper training coming in 1971. In addition to the Shepherds Bush murders, the shift in paradigm for policing was also influenced by the growing threat of domestic and international terrorism. Between 1973-82, London experienced over 250 bomb-related incidents and 19 shootings connecting with the Irish Republican

Army (IRA), causing 56 deaths and over 800 injuries (McNee, 1983: 73-82). International incidents, such as the murder of Israeli athletes at the Munich Olympic Games of 1972 and the 1985 attacks on El Al fight passengers at Rome and Vienna also prompted the deployment of armed police and military units to London Heathrow Airport and an expansion of armed officers engaged on diplomatic protection duties, guarding the Royal Family, residences and embassies around the country. Despite the rise in international terrorism the police service in England and Wales was reluctant increase the use of firearms in order to maintain the image of unarmed service (Punch, 2011: 30).

The years that followed would see a continued 'hiding away' of firearms policing, with formal policy in two of the largest police forces, Greater Manchester Police and the Metropolitan Police, requiring that armed officers kept their firearm hidden at all times (Hailwood, 2005:112). This demonstrated the staunch opposition characteristic of routine armed policing.

Hungerford Massacre

In 1987, Michael Ryan, a 27-year-old licensed firearm owner, shot and killed 17 people (including himself), and injured 15 others in the Berkshire town of Hungerford. Amongst Ryan's victims was an unarmed police officer. Ryan had no previous criminal record, no known record of mental ill-health, and at the time of the incident had legal possession of three shotguns (Smith, 1987). The events in Hungerford were unprecedented at the time and local unarmed police officers were unequipped to deal with the nature of the incident with a significant delay in armoured vehicle capability responding to the incident. Following the investigation and inquest into the incident, Her Majesty's Coroner, Mr Charles Hoie said of the police response in summing up:

> "[W]e as a nation, community, cannot have it both ways, by that I mean we cannot insist upon an unarmed Police Force and at the same time expect that Police in an emergency of that sort to become armed and become available at 'the drop of a hat'. (Smith, 1987: 70).

In the aftermath of Hungerford, the initial response to firearms incidents by Armed Response Vehicles (ARVs) became standardised. In response to issues raised by Smith (1987), and following recommendations in the McLachlan Report (1988), the acquisition of armoured vehicles and the use of ARVs to respond to incidents was supported by Her Majesty's Inspectorate of Constabularies (HMIC). It was this watershed moment shifting policing in England and Wales away from the traditional unarmed image and positioned parts of the police service as 'semi-armed'. However, whilst these recommendations led to standardisation of training for firearms officers at an operational level, there remained a lack of understanding of armed policing at senior policing ranks (Waddington,1991).

The era of the Armed Response Vehicle

Despite the growing support for 24-hour ARVs, the Home Office reviewed again the ARV role in 1992 and HMIC inspections at the time criticised continued slow response times, recommending the ARV as the best option for improving this (Southgate,1992: 6). Inconsistencies began to emerge however in the authority to arm, in particular, what an 'authority' looked like, the type and visibility of weaponry, and at what rank an authority to arm should be given. That said, Chief Constables saw no reason for a 'consistency of practice', and avoided national guidance on the use of ARVs by simply calling their county's vehicles something else (Waldren, 2007: 175).

Developing a 24-7 firearms capability was a significant cost for police forces. Selection, training and on-going development of officers, coupled with the cost of procuring weapons, ammunition, equipment and vehicles required considerable investment. Officers began to benefit from tailor-made training venues, improved weaponry and state-of-the-art protective equipment, which appeared to show an increasing status of the occupation.

Despite these positive trends, firearms officers felt disconnected from those in command of their operations. Whilst negative attitudes towards senior managers may pervade all aspects of policing, the tension in the firearms context appears particularly acute, with commanders described as 'buffoons with rank',

'incompetents' and 'shiny arse admin wank' (Punch, 2011: 39). Firearms policing is characteristically 'dirty work' and this 'sour friction' between commanders and firearms officers can be traced back to the proliferation of early ARVs in spite of the resistance from senior officers (Punch, 2011).

Policing in England and Wales today is reflective of the early ARV model. Each police force has a number of ARVs, appropriately equipped and crewed with a minimum of two officers in line with national standards, and available 24-hours a day. The number of ARVs on duty, the weaponry and ammunition carried and the specific taskings given is set within the force's Strategic Threat and Risk Assessment (STRA). The STRA is a living document which is regularly reviewed and updated and is used to create collaborative, regional and national STRAs, the purpose of which is to establish the operational requirements for the police use of firearms in the specified area(s). Once the STRA is set forces can then make decisions relating to the number of armed officers trained, the number of ARVs on duty and what equipment is used (College of Policing, 2018).

The paradigm shift

The firearms policy in England and Wales has traditionally focused on containment, negotiation and de-escalation (Kennison and Loumansky, 2007). The combination of statue and common laws provide firearms officers with the right to use force but emphasise proportionality, justification and accountability. Firearms officers cannot be ordered to fire their weapon, and all decisions must be justifiable; as Greenwood (1979: 59) confirms, 'in a police operation the only acceptable casualty rate is zero'.

Policing commentators such as Squires and Kennison (2010) and Punch (2011) have observed a conflict between the 'restraint paradigm' and the emerging 'military paradigm', which describes the military-type operations, tactics and equipment of contemporary firearms policing. In England and Wales, policing and the military are seen as separate activities.

Often the work of the military in confronting threats on British soil goes unnoticed or unreported due to the secretive nature of the units involved, however one of the

best-known examples of a military paradigm being employed is that of the Iranian Embassy in London, 1980. Following a period of police negotiation, the Special Air Service (SAS) was employed to enter the Embassy, eliminate the threats posed and rescue the hostages within. The image of black-clad operators entering a building from multiple points, utilising explosives and automatic weapons and eliminating individuals deemed to pose a threat was watched live around the world and put the SAS on the world stage in a way British Special Forces had never been before (Asher, 2009). But in contrast to the military paradigm in which the SAS retook the Embassy, the restraint paradigm could not be characterised better than in the actions of PC Trevor Lock.

On duty and armed as part of his duties with the Diplomatic Protection Group, PC Lock was inside the Embassy when the hostage-takers entered. Managing to conceal his weapon throughout the ordeal, PC Lock would later tackle one of the hostage-takers who was waiting to fire at the soldiers as they entered the building. Holding his gun to the head of the hostage-taker, PC Lock undoubtedly saved the life of one or more of his rescuers (Taylor, 2002), however as the SAS entered, the now unarmed hostage-taker was shot by soldiers. Lock said he did not fire because his training had instilled in him the belief that force should only use minimum force to effect an arrest and not to kill if it could be avoided (Waddington, 1991: 19). The action, or rather inaction, of PC Lock could not demonstrate more clearly the difference in mentality between policing and military action when considering armed conflict, however the gap between the military and restraint paradigm has continued to narrow.

Armed policing into the 21st Century

The post-9/11 era has resulted in armed policing in England and Wales moving further away from the restraint toward a military paradigm, in which firearms officers are increasingly adopting a position of shoot to kill rather than shoot to stop. Operation Kratos saw the police and Home Office debate these tactics (IPCC, 2007a), providing a formal policy for police officers to take shots to kill on the orders of a

designated senior officer. This approach represented a fundamental shift in armed policing philosophy and represented a change in mindset for firearms officers. This approach was intended to immediately incapacitate terrorists, especially those believed to be carrying suicide bombs, but the policy would be scrutinised following the shooting of Jean Charles de Menezes in 2005, which prompted two IPCC investigations (IPCC, 2007a, 2007b), academic analysis (Kennison and Loumansky, 2007; Punch, 2011; Squires and Kennison, 2010) and papers by senior Metropolitan Police officers including Sir Ian Blair (2009) and Brian Paddick (2008). This incident highlighted the change in training, weapons and equipment towards a shoot to kill policy.

Recent years have seen attacks in Woolwich (2013), Westminster (2017), Borough Market (2017), Parsons Green (2017) and at the Manchester Arena (2017), with other attacks abroad including France (2015) and Belgium (2016). These events have resulted in UK policing reassessing its armed capabilities, looking to increase officer numbers and change tactics to be able to better meet the threats posed.

In April 2016, then-Prime Minister David Cameron announced funding to increase the number of armed police across the country. Responding to terrorist attacks in Paris, the Prime Minister set aside £143 million over five years to increase armed response capability and capacity, which would include 1,000 more armed officers across England and Wales by Spring 2018, 600 additional officers in London and 40 additional armed response vehicles (Wilkinson, 2016). This move hoped to reverse a drop in the number of firearms officers where between March 2009 and March 2016 the number of AFOs declined by 1,267 (-18%) from 6,906 to 5,639 across England and Wales (Home Office, 2016).

The National Police Chiefs' Council Lead for Armed Policing, Deputy Chief Constable Simon Chesterman, explained that whilst there was 'a clear commitment' to the historic model of routinely unarmed policing, the armed response capability across the country was to be reviewed (NPCC, 2017). As part of the national uplift announced in 2016 the number of firearms officers increased, more ARVs are available across the country and there has been a significant increase in the number

of officers trained as Counter Terrorism Specialist Firearms Officers (CTSFOs) (Home Office, 2018a). However, DCC Chesterman recognised that 'armed policing remains a voluntary role and the recruitment, training and retention of officers remains a challenge for all forces' (NPCC, 2018).

Routine Arming – The Debate

The debate on routinely arming the police re-emerges often following a terrorist incident or serious assault on the police. However, the National Firearms Survey in 2017 found that whilst two-thirds of federated officers do not support the routine arming there was 23% increase from 2006 of those in favour of routine arming (PFEW, 2017). Other findings included that constables were more in favour of arming than higher ranking officers, male officers are far more likely to support routine arming (41%) than female officers (16%), and those who had experienced more threats to their life were more supportive of routine arming.

It is argued that the presence of armed police officers acts as a reminder of the threat of terrorism and serious crime, causing fear amongst the public rather than reassurance (Hales, 2016). Despite some increase in support amongst the police for routine arming therefore, public consensus appears to not support routine arming, with media commentary continuing to support a routinely unarmed police force as 'the cornerstone of policing' (Glover, 2012; Liddell, 2014; Peters, 2017).

Armed Policing Statistics – England and Wales

Officer numbers

In 2018/19 England and Wales had 6,459 armed officers, an increase of 181 (3%) from the previous year. This represents the second consecutive year of increased numbers following a previously downward trend in which numbers fell by 1,267 between March 2009 and March 2016. Despite the number of armed officers increasing, the total number of police officers has continued to fall, meaning that armed officers are making up a greater proportion of the workforce. As at 31 March

2018 there were 125,093 police officers in England and Wales (a fall of 14% from 145,948 as at 31 March 2009).

Firearms operations

A police firearms operation is when suitably trained officers are deployed in an armed capacity, following an assessment by a commander when that assessment has concluded that the criteria for the deployment, as set out in the College of Policing's Armed Policing Authorised Professional Practice (2018), is met. In year ending 31 March 2018, there were 18,746 police firearms operations in England and Wales, representing an increase of 2,937 (19%) compared to the previous year. This most recent figure is the highest number of operations since year ending March 2011. Unsurprisingly London accounts for the largest proportion of police firearms operations, with 5,142 (27%) operations taking place there. The West Midlands (3,312 – 18%) and Yorkshire and the Humber (2,130 – 11%) follow.

Discharges of police firearms

Despite the frequency of police firearms operations, the instances of a police firearm being discharged remains low. 2017/18 represented the highest number of discharges of a police firearm in a single year, with 12 incidents being recorded. This represented 0.06% of all operations and includes all incidents where conventional firearms (i.e. excluding less-lethal; taser, baton-gun, etc) were discharged.

This chapter has situated contemporary armed policing in a historical context. The move toward a military paradigm and the growing desire within policing for more firearms capability may understandably make senior officers and the wider public nervous, however, with armed officers continuing to demonstrate such high levels of restraint – as evidenced by the low number of discharges of police firearms despite increasing number of deployments – then it can be argued that we are some way off losing those traditions and values that both police officers and the public value so much.

Chapter Two: An Overview of Police Culture

The purpose of this chapter is to explore police occupational culture and the relationship with armed policing as a subculture. A critical consideration of police culture and firearms as a subculture will reveal current understanding of the influencers and barriers to pursuing an armed policing career.

Organisational culture

Organisational culture describes a set of learned assumptions and expectations, and a sharing of beliefs and values which prompt certain attitudes and behaviours within occupational groups (Bowling and Sheptycki, 2012; Schein, 2004). These shared types of behaviour, language, humour and rituals can foster a strong bond between individuals who share a common working environment creating shared understandings and meanings (Glomseth and Gottschalk, 2009: 4; Helms and Stern, 2001; Lynn Meek, 1994: 274). An organisation's culture can be seen in visible ways such as symbols, rituals, uniforms or mission statements, or in covert ways which are considered more difficult to identify and reform (Skolnick, 2008).

Police occupational culture

Police culture describes the accepted rules, norms, values and beliefs that inform police behaviours and practices (Manning, 1989; Reiner, 2010; Van Maanen, 1978). In the 'working personality' thesis, Skolnick (1966) argues that the distinctive combination of the danger of police work and authority of police officers construct particular ways of understanding the world. Police occupational culture is interconnected therefore with the nature of police work. Skolnick (1966) argues that culture plays a part in how police officers undertake their duties and most importantly how they exercise discretion when dealing with incidents. Given that enforcement of the law cannot be absolute (i.e. not every minor infraction can be

prosecuted), how officers choose to exercise their discretion will inform how crime is defined and counted, and who it is criminalised (Westmarland, 2011).

Police culture as a negative

Police culture has been used to explain unwanted behaviours in policing, the failure of reform initiatives (Waddington, 1999), police misconduct, violence and corruption (Newburn, 2015; Punch, 1985; Reiner, 2010), discrimination and prejudice (Brown, 1998; Holdaway and O'Neill, 2007; HMIC, 2013; Westmarland, 2008) and more recently, unethical crime recording (HMIC, 2014b).

Characteristics of police culture, particularly macho and sexist behaviour may act as both barriers and motivations toward a career in armed policing. However, scholars have also documented the benefits of components of police culture, such as solidarity, in coping with risk and stress of police work. Waddington (1999:295) describes the police canteen as a 'repair shop' where "police sub culture operates mainly as a palliative, rather than as a guide to future action". This draws attention to the complexities of occupational subcultures in the police.

Reforming police culture

There have been various attempts to reform the negative aspects of police occupational culture with The Scarman Report promoting one of the first significant attempts at reform. The report cited the racial prejudices of individual officers and the use of paramilitary tactics as key contributors in the breakdown of relationships between the police and black communities (Loftus, 2009; Scarman, 1981). In what was later described by Bowling (1999) as the 'bad apple thesis', Scarman concluded in his report that it was the prejudices of a minority of individual officers causing the police as a whole to be tarnished with a certain racist reputation. The Scarman Report made a number of recommendations, which included the active recruitment of minority ethnic officers, the identification and disciplining of officers who displayed prejudiced behaviour and a demonstrated commitment to treat minority

ethnicities fairly. Although the Scarman Report was no panacea for solving the prevailing social issues or the deeply entrenched cultural problems in the police, the report represented a key milestone towards diversity of the police service as a mechanism to reform policing in Britain (Newburn, 2003; Reiner, 2010).

The Macpherson Inquiry in 1999 was another pivotal moment in policing. This inquiry into the Metropolitan Police Service's investigation of the murder of Stephen Lawrence described the investigation as marred by 'institutional racism', a term which was defined in the report as:

> 'The collective failure of an organisation to provide an appropriate and professional service to people because of their colour, culture, or ethnic origin. It can be seen or detected in processes, attitudes and behaviour which amount to discrimination through unwitting prejudice, ignorance, thoughtlessness and racist stereotyping which disadvantage minority ethnic people.' (Macpherson, 1999: 6.34)

The findings of both Scarman and Macpherson were acknowledged by the HMIC (1999:36) in terms of the impact on new police recruits, confirming:

> "It is clear that new officers are heavily influenced by events going on around them. Of concern was the lack of confidence the report found of internal processes, in particular in grievance procedures and the part that nepotism continued to play in selection processes, with one force quoted in the report as having conducted an equality audit in which 75% of police officers believed it was either true or partly true that making a complaint or raising a formal grievance would be held against them."

In challenging inappropriate behaviour in the workplace, the report recommended that supervisors should be given further support and education to enable them to effectively manage and reprimand individuals who continued to exhibit unwanted attitudes and behaviours and this can be seen as evidence of the continued attempt to empower individuals within policing to address a culture that was being more and more widely regarded as contrary to the 'new values' of policing.

Police 'cultures'

Early ethnographies captured the prevalence of the action-centred, hyper masculine nature of police culture (Holdaway, 1983). Police occupational culture however does not describe a unified, singular culture but instead, contemporary theorists consider 'police cultures' to describe the differences within the police (Reiner, 2010). Cockcroft (2013:45) explains:

> "Non-monolithic accounts encourage us to view culture as an altogether more sophisticated concept and, similarly, provoke debate regarding what culture is, the extent of its influence, the effect of difference environments upon its potency and focus, its relation to wider societal culture and the extent to which it direct thought and behaviour"

Studies in policing have identified variations by rank (Reiner, 1991; Reuss-Ianni, 1981; Young, 1993), gender (Fielding, 1994; Smith and Gray, 1985), role or specialism (Hobbs, 1988; Innes, 2003; Westmarland, 2001) and urban and rural areas (Cain, 1973; Young, 1991, 1993). These subcultures reveal some unique nuances within the dominant occupational culture (Loftus, 2009; Lok, et al., 2005).

Attitudes in the police are shaped therefore by a combination of shifts, station, department or role, rank and the type of community they police. Despite recognition of the diversity of cultures within the police, there is also acknowledgement of the persistent and recurring influence of dominant cultural characteristics (Loftus, 2010). Reiner (2010) provides a well-cited summary of the core characteristics of police occupational culture; mission-action-cynicism-pessimism, suspicion, isolation/solidarity, police conservatism, machismo, racial prejudice and pragmatism. Reiner (1978) also proposes four types of police officer; the 'bobby' – an ordinary officer applying the law in a common sense fashion; the 'uniform carrier' – a cynical officer looking to get through his 'time' with as little effort as possible; the 'new centurion' – dedicated to a crusade against crime and disorder placing great emphasis on the importance of the street cop in policing; the 'professional' – an officer with a well-rounded view of the importance of all functions of policing, seeking to build a career and pursue promotion. These characteristics help to understanding the culture of firearms units in the police.

Police culture and armed policing

Since the 1960s, policing studies have explored sub-cultures in the police, however research into the cultures within armed policing is limited. Brown and Sargent (1995) explored the role of women within armed policing in Britain, and the motivations and barriers for applying. Their findings show that women are likely to be put off applying for firearms role suggesting that the *perceived culture* acts as a barrier. The authors found that at the time only 2.6% of AFOs were women, with 5% of forces having none at all, and 42% having only one or two women (ibid, 1995: 3). Brown and Sargent (1995:13) concluded "it is more likely the aspects of police culture and embedded individual and organisational attitudes which inhibit women from becoming firearms officers rather than any motivational deficit from women themselves."

The following section explores the characteristics of police occupational culture and their relevance to armed policing.

Cult of masculinity

The idea of policing being a 'macho' occupation is well established (Smith and Gray, 1985; Graef, 1990) and Fielding explains that "police forces are sites for competing ways of being a man and expressing masculinity" (1994: 56). Firearms officers work in high-stress, high-threat environments, and this type of confrontational role is regarded as 'tough work', associated with strength, physicality and hyper-masculinity. Bem's (1974) sex-role inventory provides a list of traits such as 'aggressive', 'assertive', 'forceful', 'competitive', 'willing to take a stand' and 'willing to take risks' as *exclusively* associated with masculinity. These traits are perceived as prevalent in specialist roles such as firearms and public order. By contrast, Bem lists feminine traits as including 'yielding', 'cheerful', 'gullible', 'shy' and 'flatterable', whilst Heidensohn (1996:1760) regards feminine traits as being "perceived in terms of *deficits*: lack of physical presence, of tough physique, above all of masculinity". Being a woman is perceived as inherently incompatible with the "nature of policing – involving danger and macho camaraderie" (Heidensohn, 1996:

174). The more dangerous a role, or the more a role is steeped in 'macho camaraderie', the less compatible it is with being a woman.

However, research has found very little difference between the effectiveness of male and female police officers (Bloch and Anderson, 1974; Sherman, 1975; Brennan, 1987; Noakes and Christopher, 1990; Brown, 1994; Neville and Brown, 1996). Yet despite the lack of evidence on the capability of women, they continue to experience discrimination (Brown, 1997, 2003; Brown and Heidensohn, 2000; Dunhill, 1989; Heidensohn, 1992, 1994, 2008; Jones, 1987; Silvestri, 2003, 2007). Whilst the number of women in the police has continued to increase, women still only account for 30% of the total workforce (Home Office, 2018), with the representation within armed policing continuing to be much lower still.

Action, excitement and danger

Since its inception policing has been perceived as a career choice for those seeking excitement. A considerable amount of police time is spent searching for action and danger (Smith and Gray, 1985) but this 'Sweeney-esque' portrayal of policing, which is reinforced in the media, is often in stark contrast to the realities of the role. Whilst policing offers incidents of great challenge, the routine aspects of police work can be less exciting (Holdaway, 1983; Sykes and Brent, 1983; Southgate and Ekblom, 1984; Skogan, 1994).

The 'sense of mission' leads police officers to focus on crime and seeking out work which they consider to be thrilling or exciting (Loftus, 2009; Punch, 1979; Holdaway, 1983; Smith and Gray, 1985) and there are arguably few roles within policing which hold the promise of action and excitement in the same way as armed policing. As Marks (2005) has shown, those officers predisposed to thrill-seeking are more likely to undertake the adventurous forms of police work.

'Good' quality work

The preoccupation with action and excitement leads officers to prioritise 'real' police work over 'bullshit' (van Maanen, 1978) or 'rubbish' (Holdaway, 1983). Armed policing duties can afford the officer protection from undertaking 'lesser'

forms of police work and increase the likelihood of being utilised for 'exciting' incidents or the apprehension of a dangerous or 'good' villain. The nature of armed policing in a routinely unarmed service means that those individuals charged with its undertaking are often only used when an incident presents a serious threat. Whilst police officers talk of 'rubbish' or 'bullshit' jobs, so too do they talk of 'good jobs'. 'Good jobs' may include the arrest of a 'good villain' wanted by the police, or a 'good result' from an officer's honed observational skills or physical prowess (Smith and Gray, 1985; Hobbs, 1988). These examples stand in contrast to the 'rubbish' which necessitates police involvement but which does not lead to the apprehension of a 'worthy' criminal or the offer of 'real' police work.

Orientation to work, job satisfaction and policing

'Work orientation' refers to an individual's involvement in the work organisation as well as their willingness to exert extra effort (Putti, Aryee & Liang, 1989). Goldthorpe *et al.* (1968:184) confirm 'orientation to work' refers to "the wants and expectation which men [sic] bring to their employment, and the interpretation which they thus give to their work" It is, in summary, how an individual perceives their relationship to their work (Bellah et al., 1985; Schwartz, 1986).

The concept of work orientation comprises of three categories; a 'job', a 'career' and a 'calling' (Bellah et al., 1985; Wrzesniewski et al., 1997). 'Job' orientation describes the relationship between an individual and their work, which is viewed as means to an end and does not provide challenge or fulfilment. 'Career' orientation sees individuals prioritising advancement and status within the workplace, often through promotion or specialisation, and will often be found in those seeking new challenges, skills and experiences. Finally, a 'calling' orientation is possessed by those who see their role as making a worthwhile contribution, either to their team, their organisation or to wider society.

According to Johnson (2012) police work environments tend to be very negative; continual exposure to abuse, neglect and violence, some of which can often be directed to officers themselves – combined with often competing and conflicting demands, poor representation in the media, which can lead to low morale, cynicism

and low job satisfaction (Blum 2000; Crank, 1998). In contrast, finding a role within a workplace which meets needs and expectations, the possibility of an individual operating within a negative work environment can be reduced.

Job satisfaction

Defined by Senter, *et al.* (2010:191) as "the overall assessment of positive emotions" that a worker has to his job, and as "a positive (or negative) evaluative judgement one makes about one's job or job situation" (Weiss, 2002: 175), job satisfaction is important to organisations to avoid high employee turnover and absenteeism (Gerhart, 1990; Mobley, 1977), low productivity (Podsakoff & Williams, 1986) and low organisational commitment (Jayaratne, 1993). Holland drew the conclusion that "people flourish in their work environment when there is a good fit between their personality type and the characteristics of the environment. Lack of congruence between personality and environment leads to dissatisfaction" (1996: 397). Allisey *et al.* (2014) examined the turnover of police officers and found that job satisfaction was a significant predictor of officers' intention to leave.

Motivations and policing

Reasons for undertaking a career in policing can be categorised 'instrumental' and those that are 'non-instrumental' motivators (Reiner, 1991: 62). Instrumental reasons describe extrinsic aspects such as job security, pay and status, whereas non-instrumental reasons include the interest in the role, the variety offered and the social effect the role may have. Holland (1985) asserts that career choice is based on the matching of an individual's abilities and interests with those that are required by the work, with Reiner (1978) finding that police officers lean toward non-instrumental motivations for joining. Although there have been few recent studies on motivations for entering policing (White, et al. 2010), Foley *et al.* (2008) have concluded that the factors that encourage individuals to become police officers have remained consistent over time.

Once a police officer has successfully completed their two-year probationary period, various specialisms are available. Specialisation or promotion may present opportunities for an officer to maximise their job satisfaction and satisfies their orientation to work. Research shows that officer attitudes can vary significantly over time spent 'on the job' (Evans, Coman & Stanley, 1992; Hillgren and Bond, 1975; Rogers, 1991; Violanti and Marshall, 1983). Van Maanen's (1973) study examined the initiation of an individual into a US Police Department, breaking the process down into four stages; 'pre-entry' (the choice to join the police), 'admittance' (being introduced to the organisation at training school), 'change' (the first stages of being 'on the street', often with a Tutor) and 'continuance' (the perspectives the officer comes to hold regarding their occupational and organisational setting).

One of the factors which enhance an individual's commitment to their career is when afforded an increased level of specialisation (Von Glinow, 1988). However, Pay and Morale Surveys completed by the Police Federation of England and Wales (PFEW) annually consistently find little differences in satisfaction across respondents regardless of their specialist roles.

In addition to recognising the varying interests that specialisation offers police officers, the College of Policing (2015) identified lateral development as a form of career success, rather than being solely defined by promotion, and the authority and status that comes with it. With growing emphasis on lateral development as a form of success and progression, the opportunities to move into specialised posts may begin to appear more appealing to individuals who perhaps have only ever aspired to 'success' in the traditional sense of promotion.

Police culture in the 21st Century

Policing in England and Wales is experiencing a period of self-reflection with every aspect of culture and established practice being open to scrutiny, and for the first time, drawing on the Macpherson's findings, there is a real catalyst for change. As

Bayley and Shearing conclude 'future generations will look back on [this] era as a time when one system of policing ended and another took its place' (1996: 585).

A number of recent reform policies have attempted to create a more diverse and inclusionary culture in the police; the workforce should, ACPO (2005) confirmed, 'reflect the communities that [they] serve'. By recruiting and supporting individuals from across a range of demographic, cultural and religious backgrounds, it is expected that negative attitudes and behaviours would be more successfully challenged and that community relations with hard-to-reach groups would improve. Described by ACPO (2005: 6) as 'an essential in-house bank of knowledge and skills', the benefits articulated included 'a reduction in absence from work; a reduction in grievances and complaints; access to a broader range of skills and experience; efficiency, creativity and growth; and increased staff morale' (p.9).

As made clear by ACPO, the move to a more diverse and representative workforce was regarded as being a key component of not only addressing relations with communities, but also as a mechanism to address unwanted attitudes and behaviours within the police. This view helps to describe the benefits of a representative workforce, and why the underrepresentation of groups within any subset of policing – such as that seen within armed policing - can contribute negatively toward policing experiences.

Conclusion

This chapter has sought to provide an overview of occupational culture in the police and applies this to the context of firearms policing. A core theme has been how police culture has, for the last few decades at least, been synonymous with negative attitudes, and despite the attempts at reform, the core characteristics of police occupational culture continue to inform behaviours and practices. The next chapter provides a detailed account of the methods of this study.

Chapter Three: Methods

This research is based on a survey of 287 police officers which examined the perceptions of armed policing and the motivations and barriers to become an AFO. This chapter serves as a reflective account of the research journey, from inception and formulation of the research topic, my own situatedness as an 'inside insider' (Brown, 1996) and the development of approach through to analysis. The first part of this chapter explores the research topic and the research questions. The benefits and disadvantages that come from the various positions of researcher situatedness and the determination of my own 'inside insider' status will then be discussed. The second part of this chapter will discuss the research design, including a discussion of data collection methods, the rationale for the selection of research by way of questionnaire, and an overview of the research site and sample selection. The third part of this chapter provides an account of the design of the questionnaire and the data collection followed by an explanation of the analysis. The chapter concludes with a summary of the ethical considerations of this research, the limitations of the research and a critical reflection of the research methods employed.

The Research Topic

This research was developed from an interest I have in armed policing since before becoming a police officer over a decade ago. Since undertaking an armed role, I have wondered about decisions to join. Whilst there is considerable research on the motivations police officers in general (Charman, 2017; Fielding, 1988), less is known about specific specialist roles, with armed policing in particular seeming to lack much attention. Whilst our current understanding of the police continues to be informed by works such as Manning (1977), Reiner (1978, 2010), Skolnick (1966), and Westmarland (2008), these works examine police officers from an 'outside' perspective. Despite research from the 1960s indicating the presence of sub-cultures within policing, the focusing on specific specialisms and contrasting within the policing sphere appears limited, with few exceptions (Hobbs, 1988; Innes, 2003; Westmarland, 2001).

One of the main drivers for this research was to produce work which is of relevance to the practitioner audience, which would serve to inform police forces to improve recruitment, retention and development of firearms officers, and that practitioners and academics alike could better understand the drivers to volunteer to carry a firearm. However, the practitioner response to academic research focusing on policing has often been criticised for its inaccessibility, topics of choice and lack of relevance (Brown, 1996; Van Maanen, 1982) and so, against a backdrop of increasing police firearms operations, rising numbers of armed officers, along with a commitment from Government for increased funding for policing's armed capability (Home Office, 2018; NPCC, 2018) I have sought to conduct research which is of practical benefit at a time when armed policing remains of particular relevance to both policing and the public.

Research Aims

This research explored the motivations and barriers to embark upon a career in policing and in deciding to pursue or ignore specialisation within armed policing. The primary research question for this work was; what influences a police officer when considering a career as an Authorised Firearms Officer? There were then a number of sub-questions which helped shape the primary research question and which would add relevance to the current policing context:

1) What perceptions of firearms officers exist within policing?
2) What encourages a police officer to become a firearms officer?
3) What discourages a police officer from becoming a firearms officer?

Researcher Situatedness

Police research has historically been studied from the outside by academics and others not employed or commissioned by the police or associated bodies (Reiner, 2000). The concept of insider/outsider research is used to describe the relationship between the researcher and the phenomenon being studied (Sherry, 2008), with the situatedness of the researcher bringing both benefits and risks to be managed through the research process. In considering a researcher's situatedness, i.e. who

they are, what their relationship to a police force is, their own experiences of policing etc., Brown (1996) has distinguished four permutations.

Outside outsider status describes a researcher outside of policing, with no links to a police force or partner agency (inspection bodies, government departments, etc.). The outside outsider may struggle to gain initial access to police forces to conduct their research, and once access is gained may be seen as being critical of policing practices (Reiner, 2000). *Inside outsiders* meanwhile are employed within the policing profession but do not have a background as an officer. Often employed by police forces, or by associated agencies such as the Home Office or inspection bodies, to undertake commissioned studies the inside outsider has a much easier time gaining access to subjects. However, as a representative of senior management or other authority, the researcher may face issues gaining the trust of officers due to the influence and change they may be able to bring about as a result of their findings. The *outside insider* describes the researcher who has previously been a police officer, and who is conducting research once they have left, or are in the process of leaving policing. Finally, the *inside insider* position is that of a police officer choosing to conduct research on policing, and it is from this position my research has been conducted. I am a serving police officer of over ten years who has achieved the rank of Sergeant, and also a serving police firearms officer with a background predominantly in uniformed policing and specialist operations.

The inside insider will usually benefit from ease of access to police forces to enable research to be conducted however this is not guaranteed nor is this access universal or unending. For example, access to police sites may be easily achieved by virtue of the fact that vetting and identity is not an issue, however access to certain members of staff or departments may still require permission of senior officers and obtaining the trust and confidence of participants can often be as problematic as any other researcher position. As Chavez (2008) illustrates, undertaking research on your own community brings neither unfettered nor absolute advantage and insiders will find themselves contending with multiple social identities.

Whilst it has been argued that the insider-outsider distinction is a false dichotomy given both groups have to contend with similar methodological issues (Banks, 1998; Merton, 1978) it is recognised that a researcher's position leads to differing challenges in how a subject or theme is viewed and how personal experiences can influence and skew an outcome. As Aguilar suggests, insiders and outsiders "must meet diametrically different demands…the outsider must to some extent get into the natives' heads, skins, or shoes, whereas the insider must get out of his or her own" (1981: 24).

Research Design

The research aimed to explore what motivated a police officer to volunteer to become a firearms officer and the barriers preventing or dissuading them from applying. I also wished to explore various perceptions held by both armed and unarmed officers, drawing on police culture studies relating to machismo and danger, and whether they exist in a hyper-sensitive state within specialist roles.

An online questionnaire was submitted to all serving police officers across a multi-force area. There was no directive from either the researcher or the officer's management as to who should complete the questionnaire and the option to participate was entirely voluntary. To that extent officers self-selected for participation to form part of the sample group. The purpose of this design was to capture various descriptors about participants (e.g. gender, ethnicity, rank, etc.) and then go on to probe specific topic areas before analysing the results to seek out areas of statistical association that may indicate trends or differences.

Research Methods

Semi-structured interviews were considered as a form of data collection to access rich contextual data (Schofield, 1993), which in turn would help inform the questions to be put to respondents in a later questionnaire. Whilst broad concepts such as 'danger' are spoken about within the structure of this research, these interviews offered the opportunity to explore these concepts in a way that is specific

to individuals and "provide the opportunity to gain an account of the values and experiences of the respondent in terms meaningful to them" (Stephens, 2007: 205). Normative presumptions about many of the topics being examined lie beneath sterile questioning which can often seem generic within the confines of a questionnaire and which may neglect to prioritise the understandings and experiences of the respondent.

Interviews offer the opportunity to explore an individual's beliefs and assumptions that underpin their behaviours, choices and routines (Arksey and Knight, 1999; Brown, 1983). As a research method, interviewing allows greater flexibility by affording respondents a chance to clarify ambiguities in the questions and topics being discussed (Gillham, 2000) and allows the interviewer the opportunity to adapt a question or probe for more detail (Patton, 2002). However, to ensure the feasibility of the study set against both time and budgetary constraints, the decision was made to abandon a mixed method approach in an attempt to reduce the size of the study and therefore the method of semi-structured interviews – despite the many benefits – was not utilised, and a questionnaire-approach instead adopted as the sole method of data capture.

The choice to utilise only a questionnaire was ultimately determined through the feasibility of completion of the research. The ease of ability to design, build, test, deploy and analyse were all factored into this decision and thus a survey approach through the use of a questionnaire was pursued. Characterised by a structured or systematic set of data, survey research allows for the easy capture of information about a given variable or characteristic from one (or more) groups, for example male/female, or AFO/non-AFO. Since the same information is captured for each individual the cases are directly comparable and therefore result in a completion of a structured set of data. Widely regarded as being inherently quantitative in its research approach, survey research is contrasted by qualitative methods such as participant observation, case studies and interviewing (de Vaus, 2014).

Survey research can take many forms, of which questionnaires are one of the most common methods. Dillman (1978: 80) describes five distinct types of question

content: behaviour (what people *do*), beliefs (what people *believe is true or false*), knowledge (what people *know* about a particular fact), attitudes (what people *think is desirable*) and attributes (what are *people's characteristics*). This approach was utilised in the design of the questionnaire and can be seen across the question set.

The Research Site

Many police forces in England and Wales have regionalised armed policing units across more than one force area. These collaborated units see a myriad of funding and oversight arrangements dependent upon which collaboration is being examined. They operate through a joint budget, their area of operations spans county boundaries and they recruit from across the force areas who are signed up to the collaboration.

The research took place across a number of force areas, covering a geographical area bordering a metropolitan location and including a mixture of urban and rural locations. The force areas include a number of cities and are located in a region which is the top half of the Home Office's statistics for the number of firearms deployments per year (Home Office, 2018a). These forces retain their own local policing functions, separate Chief Officer teams and separate Police and Crime Commissioners, however they share a number of joint functions, including their armed policing capability. The collaborated armed policing function services the needs of spontaneous and planned firearms incidents across the three counties and recruit officers into the team from each of the force areas with the number of officers from each of the forces contained within the armed policing team being roughly equal. The forces employ approximately 4,400 police officers in total, of which the percentage of female officers is in line with the national average of 30% (Home Office, 2018b).

HMICFRS (2018) in the most recent 'State of Policing' report scored the police forces in this study averagely on their PEEL assessments, with most outcomes ranking the forces as 'Good'. However, a number of areas were identified as 'Requiring Improvement', though this does not appear uncommon when looking at

assessments nationally. The PEEL assessment programme consists of three pillars; effectiveness, efficiency and legitimacy, as well as assessing how each force understands, develops and shows leadership. These forces can therefore be considered typical in this respect for most in England and Wales.

The forces' Armed Police Unit (APU) is typical of many other collaborated specialist units nationally. Based at key strategic locations to enable a response across the policing area the unit is responsible for providing an armed response to incidents whether spontaneous or planned. The unit comprises officers trained in a variety of skills and roles including ARV Operators, Rifle, Close Protection, Specialist Firearms Officers (SFOs), Armed Surveillance and also the policing of key national sites and infrastructure. The department also has a collaborated firearms training team and features a command and line management structure which is typical of most police forces.

The most recent statistics indicate that there are 6,459 armed officers across England and Wales, a large proportion of which are situated in London with the Metropolitan (2,520) and City of London (69) forces (Home Office, 2018a). At the time of research (February – March 2019) there were 126 firearms officers across the research area, of which seven were female. The numbers of firearms officers at the research site is typical of non-metropolitan forces nationally, with the frequency of deployments also being average for a force area of its size and type. Given the make-up of the force and its APU the chosen research site can be considered representative for most force areas.

Site Selection

The primary reason for this location being selected was to maximise researcher independence and minimise the observer effect on the research. As a serving firearms officer of supervisory rank, undertaking study with individuals known to me may lead to them modifying their behaviour and failing to answer questions honestly. I also felt that I may taint my conclusions with my own experiences and perceptions of culture and leadership within my own force area. By moving my

research away from my own force area, I would therefore reduce researcher bias and increase credibility and reliability of findings.

The second reason for this site selection was the willingness of the constabularies to participate and the hospitality demonstrated toward the research from senior leadership, which empirical research in policing has long captured as being an important precursor to reform (Chan, 1997; Savage, 2007). This combined to enable ease of access, ratified and promoted at Chief Officer level, which constituted an important consideration for selection of research site (Schofield, 1993).

Consideration was given to selecting a number of research sites to allow for a wider comparison, however this approach was not considered feasible in the time afforded for the research. I further felt that the aims of my research, whilst likely impacted upon by individual force cultures, was generic to policing as a profession and there was nothing to indicate that matters such as gender perception, thrill-seeking or attraction to danger would necessarily be influenced by geography. By focusing on one research site and inviting the views of all roles and ranks on the issue of a single armed policing team, a greater level of understanding could be achieved and the findings used to inform practice in the research area.

Research Sample

This study is concerned with the use of statistical generalisation whereby probability theory is used to estimate the likelihood of patterns observed in a small group (the sample) applying in the same way to the larger group (the population). Using statistical analysis researchers should be able to suggest, with varying degrees of confidence, whether patterns are significant due to their statistical association, and to what extent we should expect to see that pattern replicated in the wider context. This approach relies upon having a random sample from which to collect the data. In this study the population refers to all serving police officers in England and Wales, and the sample refers to those who responded to the questionnaire, all of whom are serving officers employed within the research site. The goal of sampling

is therefore to obtain a sample that properly mirrors the population it is designed to represent (de Vaus, 2014) and all steps possibly taken to ensure all individuals within the population have an equal opportunity for inclusion.

The use of internet questionnaires has been criticised as being exclusionary, for example they exclude those without computers or internet-access, may not account for individuals with accessibility problems, or may introduce gender, age or class bias. To address this the questionnaire was distributed within the research area by the forces involved, with officers permitted to participate whilst on duty. This approach ensured that all members of the population had access to the questionnaire in a manner which was suitable for them, and there could be a reasonable assumption that any individual who did encounter a barrier to completion could raise the matter internally for resolution. Issues in relation to the provision of equipment, ability to use technology, time to participate and additional support to those who require it should therefore have already been addressed as part of the force's business-as-usual employment of the individual. Deploying the questionnaire into an environment where the population therefore has provision of equipment and will have received force-provided training in which to use it, therefore acted as a mechanism to reduce the sample bias.

Sample Selection

To help ensure a representative sample the questionnaire was distributed electronically across all policing commands within the research site. No individual was excluded from completion due to their current posting or rank, nor was any individual excluded through any particular personal characteristic. The questionnaire was open for completion during the research window on a 24/7 basis to allow all individuals to participate regardless of shift pattern, and the research window was open long enough to account for individuals who may be absent from force due to annual leave, sickness, training or abstraction.

The sampling method utilised in this study relied primarily upon the self-selection of participants. While the forces involved had agreed at senior management level to participate in the research, individuals could not be mandated to participate and

with that in mind the decision of an individual to either complete the questionnaire or not essentially required a self-selection approach. Methods were considered to ensure the randomisation of participant interaction, including the use of current posting information and employee identification numbers within population, as the basis for random selection however this was discounted for a number of reasons. The size of the population set against the time frame in which the research was undertaken was a significant factor, however the issue of anonymity was also considered of paramount importance. Evidence suggests that officers are wary of having their behaviour and answers directly attributable to them, with researchers often perceived as a 'management spy' (Loftus, 2009; Reiner 1978) and it was felt that self-selection, with guarantees of anonymity and a clear separation of identity and answers, would maximise returns. I also believed that approaching individuals nominated by way of a random selection, rather than letting individuals choose their participation for themselves, may increase the likelihood of participants submitting answers which they considered socially desirable. Despite social desirability problems being less evident when questionnaires are self-administered rather than in face-to-face interviews or over the telephone (Tourangeau and Yan, 2007; Kreuter et al., 2008), the possibility of socially desirable outcomes I felt still existed especially in relation to questions exploring gender issues within policing, and so did not want responses to be in any way attributable to individuals so as to reduce the likelihood of over-reported 'desirable' behaviours and under-reported 'undesirable' behaviours (Bradburn et al., 1978; Bradburn et al., 2004; Foddy, 1993).

The demographic of the research sample is discussed in more depth at the outset of the Findings chapter of this research.

Questionnaire Construction

The questionnaire was built online using JISC Online Surveys (formerly BOS). The questionnaire was intended to be open for two months, from 1st February until 31st March 2019, however the questionnaire was not published in the host force for participation until 26th February, therefore the window for responses was almost

halved. The impact of this reduced timeframe for data capture is unknown but it can be assumed that with a larger window and the opportunity for greater publication and discussion within the workforce a greater number of participants may have completed it.

Asking questions of firearms officers and non-firearms officers the questionnaire acted as a tool to collect opinions on a range of topics, including views of routine arming, perceptions of danger and excitement, which characteristics respondents felt were desirable (or not) in the role of police officer and firearms officer and which factors individuals considered when making choices about their own career development. The questionnaire was divided into a number of topic areas as outlined below, which would begin to shape the themes to be discussed as part of this research.

- Profiling Questions
- Danger and Excitement
- Culture
- Motivations
- Barriers
- Individual Compatibility

The questionnaire started by asking respondents to indicate a number of individual characteristics, such as age, gender, ethnicity and religion. It also asked for a number of professional characteristics such as length of service and current rank. This data was important to be able to draw comparisons when discussing the other topic areas and hypothesising in relation to what influence gender has within armed policing, whether the role or views of armed policing is influenced by age or rank, or whether there are any compatibility problems conflicting between roles within policing and individual's lifestyle.

Topics such as 'danger', 'excitement' and 'workplace culture' were explored as themes taken from existing literature. Where these phenomena are written about in the sense of policing within wider society, this research hoped to explore those same

concepts from an armed or unarmed perceptive within policing, in essence looking for hyper-sensitivity of the concept. Selecting these topics was intended to address areas within the research concerned with, for example, whether thrill-seeking was more prevalent within armed policing compared to unarmed policing, whether perceptions of danger differed between roles, whether attitudes towards gendered behavioural traits varied and ultimately which, if any, of these factors were a determining factor for individuals in decided whether to become an AFO.

Question Selection

As outlined previously in this chapter the questions were grouped into a number of categories to help assist the participant with completing their answers. Grouping the answers is felt to provide greater structure and flow and it was believed that anything that could be done to make the completion process easier should be done to maximise the response rate. However, the topics described on the questionnaire – which would have been visible to the participant – were not worded or structured in the same way as the themes being explored within this research, and this was done to not make it obvious to the participant what underlying factors were being explored. It was felt this was necessary to reduce the likelihood of socially desirable answers.

The Likert Scale

The questionnaire makes use of the Likert scale when asking the respondent for their level of agreement or endorsement of a statement or concept proposed in the question. The decision to ask respondents to indicate their attitude toward an individual question or concept, rather than to place a group into an order of preference, was made to ease participation and encourage completion. The frequency with which a Likert scale response was required within the questionnaire meant that having to order so many variables into order of preference would contribute to unacceptable levels of respondent fatigue (Bradburn and Mason, 1964; Herzog and Bachman, 1981). Participating in a questionnaire requires time and effort on the part of the respondent and as the motivation and ability needed to accurately answer the questions declines assigning a ranking by way of Likert scale,

rather than the ordering into preference, was considered most appropriate (Ben-Nun, 2011).

When utilising a Likert scale, a common approach might be to ask respondents to select from "strongly disagree", "moderately disagree", "mildly disagree", "mildly agree", "moderately agree" and "strongly agree". The scale options can take the form of an odd or even number of responses which would either allow respondents a neutral mid-point (e.g. point 4 on a 7-point scale), or force respondents into either agreeing or disagree – albeit mildly – one way or the other. There is discussion surrounding the presence of a neutral option for respondents (e.g. "neither agree nor disagree") as to whether this provides an opportunity for apathetic disinterest (DeVellis, 2012) and it has been suggested that a neutral option is not recommended (Krosnick and Presser, 2010). However rather than indicate a lack of interest I felt the option to be neutral was important in helping to indicate how a concept was in fact not relevant in determining an individual's status as an AFO. For example, a respondent positioning themselves neutrally on a scale exploring whether men make better AFOs than women would indicate that gender was unimportant, and I felt it counterproductive to force that respondent to either agree or disagree with such a statement. Whilst there is disagreement on this matter, de Vaus (2014) concludes that the weight of research evidence suggests the inclusion of a middle position avoids an artificial directional opinion and is the most desirable approach.

Where I have asked respondents to 'agree' or 'disagree' I have used the same scale throughout the questionnaire for reasons of aesthetic consistency, with each option presenting five positions from one extreme to the other, with a neutral midpoint. The only exception being where the desirability of behavioural traits was explored in line with the Bem Sex-Role Inventory (BSRI), in which case I expanded the scale to seven points of agreement to try and enable more accurate reporting of opinion. The use of a seven-point scale is also in keeping with the original BSRI study and the various re-evaluations of the BSRI which have come since its development.

I discuss the problems that arise from interpreting data captured through the use of Likert scales later in this chapter.

Question Development

The development of questions began with the themes which came from reviews of existing literature, and which were felt to be particularly prevalent to armed policing. Combined with anecdotal evidence and issues being faced within the research site the themes for analysis were categorised as follows:

- Profiling questions
- Danger / Excitement / Thrill-seeking
- Gender, acceptance and accessibility of armed policing
- Other possible barriers and motivations to becoming an AFO

Appendix A illustrates the question areas that were probed with the participants, which area of the research they relate to and a short summary of the rationale for the inclusion of that question and what it hoped to achieve.

I was mindful during the design and build phases of the size and complexity of the questionnaire and the impact that may have had on responses. There is a widespread view that long questionnaires increase the burden on respondents and thus leads to non-response (de Vaus, 2014), although a review of the available evidence shows there is little research supporting this assumption (Bogen, 1996). Analysis of the questionnaire once closed showed that 185 individuals consented to the 'Participant Information' page and commenced the questionnaire before abandoning it prior to completion. Figure 1 below shows at what stage of the questionnaire individuals abandoned their response.

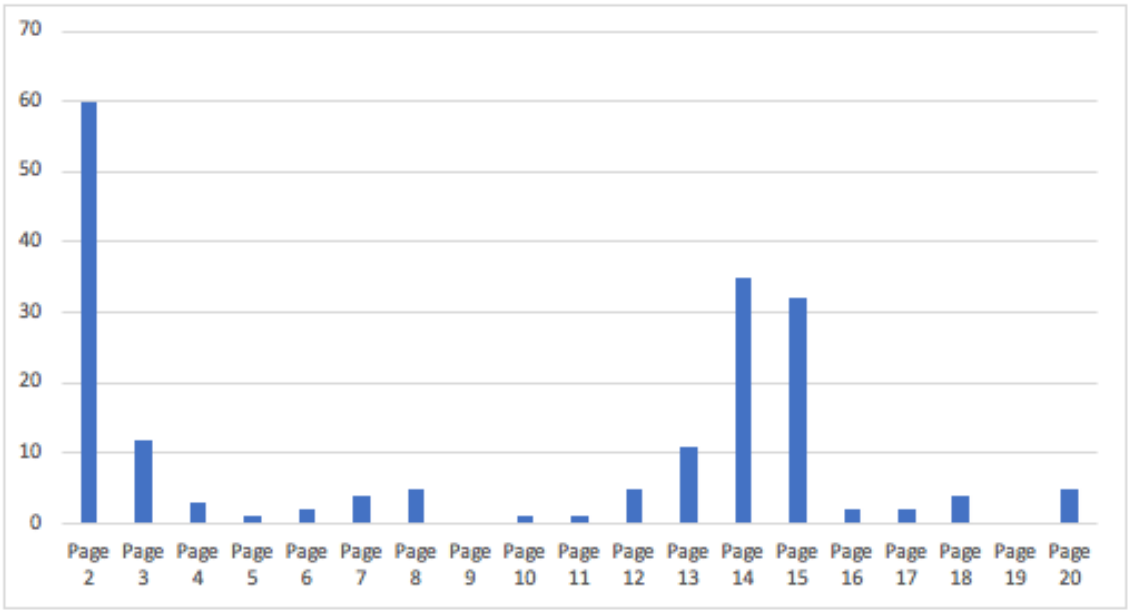


Figure 1 – Stages at which participants abandoned the questionnaire

There are three points in particular where the most significant rate of abandonment occurred; Page 2, Page 14 and Page 15. Page 2 contained the 'Profiling Questions' part of the questionnaire, in which individuals were asked eight questions about their age, ethnicity, gender and length of service. On reflection I would consider moving this part of the data capture to later in the questionnaire as advocated by de Vaus (2014), instead opting to commence with easy-to-answer, more engaging questions.

Pages 14 and 15 relate to one of the most demanding and visually least-appealing parts of the questionnaire, where Non-AFOs were asked to rate how desirable they felt 28 behavioural traits were in Police Officers (Page 14) and AFOs (Page 15). It is clear that this question was significantly off-putting to participants, and whilst it formed a key part of the research the loss of over 60 participants at this point is significant.

On reflection I feel that the length of the questionnaire, and the presentation and structure of some of the questions, may have played a part in the abandonment of participants, although evidence to support such a conclusion is lacking. I discuss my reflections on the questionnaire further at the end of this chapter.

The Bem Sex-Role Inventory

Developed in 1974 by Sandra Bem, the Bem Sex-Role Inventory (BSRI) changed the way in which the notion of masculinity and femininity constituted a single bipolar dimension with each concept at the opposite end of a single continuum. In the development of the BSRI, Bem gave a list of approximately 400 personality traits to 100 people who were instructed to rate how desirable it was for a man/woman to possess each of those characteristics, with emphasis placed upon the importance of evaluating these characteristics in a man/woman. The respondents were asked to rate the desirability of each characteristic using a seven-point scale, from 1 (not at all desirable) to 7 (extremely desirable). Based upon the data a trait was considered 'feminine' if it was independently judged to by both males and females to be significantly ($p < 0.05$) more desirable for a woman than a man, and vice-versa for 'masculine' traits. Twenty of the 'masculine' and twenty of the 'feminine' traits were selected, along with twenty 'neutral' (i.e. not classified as 'masculine' or 'feminine') to form the 60-trait BSRI.

Since the development of the BSRI the roles of men and women in western society has changed, with one of the most notable changes being the growth of women in both the international and UK labour markets. The most recent national examination by the Office for National Statistics found that whilst men continue to have consistently higher employment rates compared to women, the percentage of women in employment has grown from around 53% at the time of Bem's work, to 72% today (ONS, 2019). UK policing has seen a continued growth of female police officers, with figures currently showing that 30% of the workforce is female, up 5% from 2009 (Home Office, 2018b).

Despite a shift in the roles of men and women in society the BSRI has been used extensively since its inception, with examples including being used to compare BSRI scores with peer-rated and self-rated leadership (Gurman & Long, 1992) and asking a participant to consider a BSRI score in context of themselves in different societal roles such as parent, student and romantic partner (Uleman & Weston, 1986). Many studies, rather than applying the BSRI to an area of research, have sought instead to assess the validity of the BSRI itself (Ballard-Reisch and Elton, 1992: Lara-Cantu and

Suzan-Reed, 1998; Martin and Ramanaiah, 1988; Schmitt & Millard, 1988; Waters, Waters & Pincus, 1977; Wong, McCreary & Duffy, 1990), although the results of these assessments have been inconsistent. The work of Auster and Ohm (2000) sought to bring together these approaches and re-evaluate the relevance of the BSRI three decades later. The findings of this study were that, by using Bem's criteria, 18 of the original 20 feminine traits still qualified as feminine but only eight of the original 20 masculine traits still qualified as masculine. The work of Auster and Ohm therefore informed the selection of BSRI traits that would be used in this research to ensure that the traits being tested were as relevant as possible to modern understanding, given the magnitude of difference between desirability rating "for a man" and those "for a woman" have decreased since the BSRI's development (Holt and Ellis, 1998)

With research evidencing a more contemporary distribution of traits across the gender divide this research utilised the eight masculine traits which were identified as still being inherently 'masculine' (acts as a leader, aggressive, ambitious, dominant, forceful, has leadership abilities, independent and masculine), and all others were discarded as no longer meeting the 'masculine' criteria. To ensure an even spread of masculine, feminine and neutral behaviours, eight traits were then selected from the 18 feminine behaviours which Auster and Ohm found to still be considered 'feminine' and from the original 20 traits which the BSRI classifies as 'neutral'. These were selected at random by assigning each trait a number and using a random number generator to select those for inclusion.

In deciding how to present these options within the questionnaire it was determined that grouping them into masculine, feminine and neutral would be counter-productive, and may lead to participants becoming conscious of the topic being explored and therefore adjusting their answers accordingly. To randomise the order in which the traits were listed, each of the 24 behaviours was assigned a number (masculine 1-8, feminine 9-16, neutral 17-24) and a random number generator used to determine the order in which they were listed in the questionnaire. A full list of the items on the BSRI is shown at Appendix B, with those

selected for inclusion in this research shown below in Table 1, with the number following each item reflecting the position of each within the questionnaire.

In deciding whether or not to include the obviously gender-specific traits of 'masculine' and 'feminine' the work of Harris was considered, in which both traits were omitted from a BSRI re-evaluation study due to "vagueness in meaning and their potential biasing nature" (1994: 246). Harris concludes that this process is in keeping with the factor analysis of other studies (Berzins, Welling and Wetter, 1978; Geudreau, 1977; Pedhazur and Tetenbaum, 1979) as well as with Bem's later work (1979, 1981a, 1981b). However, the behaviours of 'masculine' and 'feminine' were included here as it may be a useful indicator to compare the response to those behaviours which are quite obviously gendered, compared to those behaviours which might be more fluid in their gender interpretation.

Masculine Items	**Feminine Items**	**Neutral Items**
Acts as a leader (24)	Compassionate (18)	Adaptable (4)
Aggressive (21)	Feminine (12)	Conscientious (1)
Ambitious (2)	Gentle (8)	Friendly (13)
Dominant (10)	Loyal (15)	Likeable (22)
Forceful (16)	Sensitive to the needs of others (14)	Reliable (17)
Has leadership abilities (6)	Sympathetic (5)	Secretive (9)
Independent (20)	Tender (3)	Truthful (7)
Masculine (19)	Understanding (23)	Unpredictable (11)

Table 1 – Items selected from the BSRI for inclusion in research

Questionnaire Testing

Once the questionnaire was constructed it was published online with restricted access to enable testing of various question paths and to identify any ambiguity in questions or response options. During testing four issues were asked to be considered by testers; flow, question skips and pathways, timing, and respondent interest and attention. Those testing the questionnaire included 11 Criminology undergraduate students with no policing experience, along with 10 serving police officers who would not form part of the research sample, divided 50% AFO and 50% Non-AFO. The rationale for this selection for testing was that if students with no policing experience could understand the questions and options being presented then this would be a strong indicator that those same concepts should be easily understood by those in policing. The AFOs and Non-AFOs were asked to feedback whether they felt the questions and options were worded correctly, were relevant and appropriate, and to test whether when answering the question, they felt they were truly giving an opinion on the construct I was hoping to explore.

In asking to consider the flow of the questionnaire, testers were asked to think about whether the move from one topic area to another was appropriate and well-timed and was it noticeable as to what topic was being explored at that point in the questionnaire. Feedback on this topic led to sub-headings being made clearer and a re-order of some of the topic areas. Most notable was the move of the substantial 'desirability rating' sections to later in the questionnaire to try and encourage participants to finish rather than be confronted with a demanding question early on and prompt early abandonment.

In considering question skips and pathways, those participating in testing were provided with a copy of the questionnaire pathway so they could ensure the questionnaire was taking them where intended based upon answers they had given previously. This highlighted a formatting error in which participants entered into a closed-loop mid-way through completing the questionnaire, making it impossible for some respondents to complete it. This was corrected as a result.

Once all testing was complete I was able to check the start and finish time of individual respondents to explore how long responses had taken. The serving Police Officers answered the questionnaire quicker than the students, but the average response time for all involved was just under 20 minutes. I considered this an acceptable figure given the demographic of those testing and was content that this was an acceptable requirement of time to complete for when the questionnaire went live.

Finally, those charged with testing the questionnaire were asked to try and monitor their fatigue and interest levels as they worked through the various stages. No comments were made to suggest that the questions were boring or overly complicated and no restructuring suggested as a result. A number of questions were re-worded for clarity and in some examples the use of capital letters used to emphasise the difference between similar questions and options.

Analysis

Analysis of the data collected was analysed predominantly using IBM SPSS statistical software. This section will discuss the reliability and validity of results, the data types obtained, summarise the rationale for the various analytical techniques applied to the different question styles and the assumptions made when exploring relationships between variables and differences between groups.

Reliability and Validity

In determining the credibility of the research through the usefulness of the data, the quality must be examined. Concerned with reliability and validity, both are required to ensure that the concepts or phenomena that the research intends to study are in fact the ones being explored, and that any conclusions drawn can be assumed the same for the population.

The reliability of a study indicates to what extent the instrument of measure consistently performs in a predictable way, yielding consistent measurements of a

phenomena regardless of who uses it (Payne and Payne, 2011). In practice this means that the instrument should produce the same score and should only show a different score in the event that there has been a change in the variable. A perfectly reliable instrument will produce the true score and nothing else, however in practice this is largely unachievable and so attempts must be made to minimise error and explain where and why error occurs.

Validity is concerned with ensuring that when we identify something, it is the *right something*, that serves a useful purpose and has positive consequences when used in practice (Humbley and Zumbo, 1996). Research aims to produce results that are believable and this requires techniques which capture the concepts desired as part of the study.

Cronbach's Alpha coefficient (α)

To ensure scale reliability in the use of scales Cronbach's Alpha coefficient has been calculated to ensure that the same underlying construct is being measured through internal consistency. Whilst Cronbach's Alpha is often used to test the reliability of the questionnaire as a whole, given this study has a number of themes within it I have opted to apply Cronbach's Alpha more liberally within a specific question or question set. Ideally Cronbach's Alpha coefficient of a scale should be above 0.7 (DeVellis, 2012) however in scales with fewer than ten items it is common to find low Cronbach values and so Briggs and Cheek (1986) recommend reporting on the mean inter-item correlation, with a suggested optimal range of 0.2 to 0.4. I will report both values where necessary as all scale-related questions within this research contain less than ten items.

Scale reliability is important throughout the questionnaire; however, it is particularly noteworthy in discussing the desirability of personality traits in Police Officers and AFOs due to the significant part of the questionnaire made up of these questions. When considering the desirability of specific behavioural traits, selected from the Bem Sex-Role Inventory and totalling 24 in number (eight masculine, eight feminine, eight neutral), I anticipate this will give some indication as to which behaviours are valued and whether this goes some way to explaining perceptions

and barriers within armed policing. In seeking to check the reliability of the scale in measuring 'masculinity', 'femininity' or 'neutrality' I have therefore calculated both Cronbach's Alpha and the mean inter-item correlation to ensure consistency and report this here as an example of Cronbach's Alpha as applied to this research. A summary of the Likert scale used in measuring desirability of these behaviour traits is discussed below and summarised in Table 2.

When examining scale consistency for the desirability of all behaviour traits in a police officer and in an AFO, Cronbach's Alpha is shown to be $\alpha = 0.80$ with an inter-item correlation mean of 0.2 for both. Negative figures were found in the Inter-Item Correlation Matrix for 'unpredictable', 'dominant', 'aggressive' and 'forceful' which seem to represent a difference in those traits that some respondents may consider to be an undesirable trait.

Breaking the desirability rating of behaviours in police officers into gender group, the masculine traits produce $\alpha = 0.6$ and an inter-item correlation mean of 0.2, feminine traits produce $\alpha = 0.8$ and an inter-item correlation mean of 0.4 and the neutral traits produce $\alpha = 0.4$ and an inter-item correlation mean of 0.1.

When considering desirability of the specific behaviour traits in AFOs, the masculine traits produce $\alpha = 0.63$ and an inter-item correlation mean of 0.2, feminine traits produce $\alpha = 0.85$ and an inter-item correlation mean of 0.4 and the neutral traits produce $\alpha = 0.43$ and an inter-item correlation mean of 0.13.

Item Grouping	Cronbach's Alpha (α)	Inter-Item Correlation Mean
All behaviours	0.9	0.1
All behaviours in a Police Officer	0.8	0.2
All behaviours in an AFO	0.8	0.2
All masculine behaviours in a Police Officer	0.6	0.2
All feminine behaviours in a Police Officer	0.8	0.4
All neutral behaviours in a Police Officer	0.4	0.1
All masculine behaviours in an AFO	0.6	0.2
All feminine behaviours in an AFO	0.9	0.4
All neutral behaviours in an AFO	0.4	0.1

Table 2: Summary of Cronbach's Alpha and Inter-Item Correlation Mean for desirability scale

Cronbach's Alpha scores above the desired 0.7 threshold on the majority of occasions, however there is some slippage when considering the desirability of masculine traits in the context of both police officers and AFOs. Cronbach's Alpha also drops below the desired 0.7 when considering neutral behaviour traits. However, in the case of masculine traits, the inter-item correlation mean is within the 0.2-0.4 range for scales with fewer than ten items. The only occasions where both Cronbach's Alpha and the inter-item correlation mean drop below desired thresholds is when applied to the desirability scale in relation to 'gender neutral' behaviour traits, which may be accounted for given that neutral traits are by their very nature less gender-specific and therefore open to wider interpretation across the research sample than the masculine or feminine alternatives.

Data Types and Measurement

The four levels of variable measurement can be divided into two categories; qualitative and quantitative. These two groups can be further broken down, with qualitative variables being nominal or ordinal in nature, where quantitative variables are either interval or ratio. The majority of variables in this research can be considered categorical in type; either nominal or ordinal. This section includes a brief discussion of the four levels of variable measurement.

Nominal-level measures relate to a variable which has two or more categories assigned to it, but those categories have no rank or intrinsic order. Unlike the other forms of measurement, nominal variables are usually discrete and qualitative in nature, providing no structure and with no defined distance between assigned values. Nominal categories serve as labels only, for example if a sample were asked to provide their eye colour categories may include 'blue', 'green', 'brown' etc. The measurement of this variable however does not order the results, it does not determine that blue comes before green, or that brown is any 'less' of an eye colour than blue. The labels assigned have no mathematical meaning as a result and a response cannot sit in more than one category; nominal variables are whole, discrete and usually mutually exclusive.

The second form of categorical measurement is that of ordinal data. Ordinal data is similar to nominal data, however ordinal measures indicate a ranking or order to results. However, whilst ordinal measures can indicate a ranking they do not place a value on the 'distance' between two scores. For example, if a participant were asked to indicate their interest in a sport, they may select from "I don't like it", "It's ok" and "I love it". These responses have a clear order, from disinterest, through neutrality, to indicating interest or enjoyment, however what it does not do is indicate the 'distance' in measurement between the answers. It cannot be concluded that "It's ok" is twice as positive as "I don't like it", for example.

The final two types of data are those of interval and ratio type. Interval measurement is that which can be measured along a continuum and which has a numerical value, and where the 'distance' between measures is consistent. For

example, temperature in Celsius whereby the difference between 20 and 30 degrees is the same as the difference between 30 and 40 degrees. Ratio measurement is similar to interval, but has an additional condition whereby 0 (zero) indicates there is none of the variable present rather than just being a point on a scale. Examples of ratio measurement would include mass, height, distance etc.

Data type becomes of particular relevance when determining how best to interrogate and analyse in the pursuit of findings. The next section of this chapter will deal with the analysis methods used.

Chi-squared test for association (χ^2)

The chi-squared test has been used throughout the analysis of this research to determine whether any associations exist as a result of the data collected through the questionnaire. Associations have been particularly sought based on AFO status (AFO or Non-AFO), and gender.

By recording the observed frequencies of a relationship between two variables within the questionnaire and comparing this to the frequencies that would be expected in the absence of any relationship between the variables, in the event that the observed frequencies differ sufficiently from the expected frequencies then it can be concluded that there is a relationship or association between the variables. Having calculated the crosstabulation and arrived at both chi-squared and p-values, in the event that $p < 0.05$ the null hypothesis of no association between the variables is considered false and an association indicated. Where an association is reported the analysis has been shown in the appendices by way of SPSS output.

Chi-square assumes a 'minimum expected cell frequency' of five or more, therefore in the instances whereby the expected count is less than five, Fisher's Exact Test has been applied. Whilst there is debate about the validity of chi-square requiring all expected frequencies to be greater than five, and some suggestion that an expected count less than five is acceptable providing these features for no more than 20% of counts (Yates, Moore & McCabe, 1999; 734), for this assumption to be ignored then a larger sample size (greater than 1,000) would be required. Given the sample size

in this research, in particular the low number of AFO respondents, and the frequency with which expected counts go below five, the chi-square and p-values stated are those from the application of Fisher's Exact Test.

When a statistical association has been identified the effect size has also been reported. Calculating the effect size following the crosstabulation procedure, the phi coefficient has been used for 2x2 tables, and Cramer's V used for tables larger than 2x2. In determining effect size, Cohen's (1988) criteria of 0.10 for small effect, 0.30 for medium effect and 0.50 for large effect have been used. Where no association is found the effect size has not been reported.

The decision to use the chi-square test has been influenced by the prevailing nature of non-parametric assumptions, most notably the absence of normally distributed data. Recognising that non-parametric techniques are 'less powerful' than their parametric equivalents and are therefore likely to be less sensitive in detecting relationships or differences between groups, the alternative options of pursing parametric techniques in contravention of the required assumptions, or data manipulation to try and fit into a parametrically-acceptable distribution has been discounted. This is primarily due to small sample sizes where manipulation or contravention of assumptions will have too drastic an effect on the outcome.

The assumptions made in using the chi-square test therefore are as follows:

- Assumption 1: the variables are measured at an ordinal or nominal level;
- Assumption 2: the variable consists of two or more categorical, independent groups, i.e. each variable has two more categories (male or female gender, white, black or mixed ethnicity etc.) and that each respondent cannot fit into more than one group at a time (e.g. a respondent cannot be both male AND female).

Mann-Whitney U test

The Mann-Whitney U test has been used when wanting to explore whether one group of respondents has scored more highly than another on a particular question, and in doing so produces the mean rank for each group. The test does this by

exploring whether there is any difference in the medians and then determining whether it is significant enough to suggest that the difference in scores is due to the fact that the respondents feature in one group or the other.

In the same way that the chi-square test is a non-parametric technique, so too is the Mann-Whitney U test, and likewise it requires a number of assumptions be made about the data:

- Assumption 1: there must be one dependent variable measured on the continuous or ordinal level (e.g. the Likert scale responses);
- Assumption 2: there must be one independent variable consisting of two categorical, independent groups (e.g. male/female, AFO/Non-AFO);
- Assumption 3: there must be independence of observations, with no relationship between the observations and no participant in more than one group;
- Assumption 4: the distribution of scores must be the same for each group (e.g. the distribution of scores for AFOs and the distribution of scores for Non-AFOs).

Where the Mann-Whitney U test has been used, the frequency distribution has been displayed in such a way as to be able to compare the shape of distribution across groups to assist in the interpretation of the Mann-Whitney U test results.

Indication of direction in the event of association

Where a statistically significant difference or association has been found in the data attempts have been made to interpret the findings in such a way as to indicate in what direction the association tends toward. For example, does one category consider a concept more or less appealing than another, and if so which way round is the difference noticed.

Much of this research has made use of Likert scales, most often where participants have been asked to what extent they agree with statement. As discussed previously in this chapter this produces results that are ordinal in nature, that is they have an order but with no attributable 'value'. In other words, it cannot be assumed that the

difference between responses is equal even though the distance between the numbers representing those responses are. Controversy therefore exists regarding whether this ordinal data can – or should – be converted to numbers and then treated as interval data (Carifo and Perla, 2008). Whether or not the ordinal data produced from Likert scales should be transposed into its interval equivalent then suggests whether means and standard deviations can be used to analyse the data. Jamieson (2008) makes a useful comparison when exploring the meaning of the average of "never" and whether or not "rarely and a half" has a useful meaning in analysis.

It is with this debate in mind that I have chosen to describe the direction of association through discussion of frequency distribution, the use of modes as the most common response and the use of mean *ranking* when indicating whether one group is more or less 'something' than the other. The median has been reported on occasion, however due to the small sample size – particularly in relation to AFOs (n = 34), and most notably female AFOs (n = 2) – the reporting of the median is of limited value given it is the same across both groups.

I am aware of the opposing view which supports the argument that Likert data can be interpreted through parametric means (Norman, 2010) but this research has been positioned such that non-parametric analysis is most appropriate, and that simple application of a mean score on a Likert scale producing ordinal data is of limited value, although I am accepting that the mean value may be helpful in supporting a finding even if not sufficient to justify it in isolation.

Ethical Considerations

Ethics in research ensures principles relating to the rights, safety and well-being of participants are preserved and for this research have been underpinned by the various Codes of Practice owned and maintained by Canterbury Christ Church University as well as with guidance from the British Society of Criminology Code of

Ethics. This section of the chapter will detail some of the challenges and decisions made as part of this research.

Informed Consent

The British Society of Criminology Code of Ethics outlines as part of researchers' responsibilities towards research participants, that research should be based on the freely given informed consent of those studied, with a requirement placed upon researchers to fully explain in meaningful terms what the research is about. Informed consent should cover terms including the research 'purpose, methods, demands, risk, inconveniences and its outcomes' (Israel and Hay, 2012: 502). Participants in this research were provided with a detailed overview online as the first part of the questionnaire, and were not able to commence the questionnaire until they had indicated they had read and agreed to the terms. This online participant information sheet, shown in full at Appendix C, included:

- Background and overview of research topic and introduction to the researcher;

- Description of what will be required of the participant, i.e. answer a number of questions as part of an online questionnaire in relation to armed and unarmed policing and career development;

- Requirements of participants to participate in the research, which in this case only required the individual to be a serving police officer of any rank;

- Details of processes for withdrawing consent, requesting to see personal data, requesting the restriction of personal data and for having personal data removed and no longer used for processing;

- Details of how to obtain feedback and how results will be disseminated;

- Confidentiality and Data Protection relating to how data will be obtained, stored anonymised and shared;

- Contact details for the researcher.

In addition to ensuring the consent obtained from participants was as informed as possible it was also important to ensure that consent was given voluntarily. It has been identified that voluntary consent in hierarchical organisations such as the police can be difficult to obtain (Gravelle, 2014; Herrington and Colvin, 2016; van Dijk et al., 2015) with junior officers potentially feeling forced or obliged to co-operate due to implicit or directly expressed instruction from senior management (Norris, 1993; Thomas, 2014).

Access and organisational consent were gained by approaching the senior management responsible for armed policing in the research area and holding meetings to discuss the aims of the research. It was at this point the forces were asked whether as part of the research, and providing it fell within the defined themes of the research, there were any issues relating to armed policing that the research could perhaps assist with. This was offered to try and achieve some immediate 'real world' benefit for the research however the forces involved had nothing to suggest and were happy for the research to be shaped on their behalf. Once approval had been gained from within the Armed Policing Unit, consent was later gained on behalf of all forces by a Deputy Chief Constable following consultation with the individual leads for the Equality, Diversity and Inclusion boards at tactical and strategic levels.

Once consent had been gained from the organisation the link to the online questionnaire was distributed through the force areas and individuals offered the opportunity to participate. Whilst little could be done to influence what could have been seen as implicit pressure to participate by virtue of the chief officer support that had been secured, it was explicitly communicated on a number of occasions that participation was entirely optional.

Confidentiality and Anonymity

Maintaining both confidentiality and anonymity is important for ensuring research participants feel comfortable to be honest in the information they provide without fear of repercussions. Whilst confidentiality and anonymity are linked concepts, Hopkins notes the terms refer in fact to different notions; 'anonymity refers to the protection of the specific identities of individuals involved within the research process, whereas confidentiality refers to the promises not to pass on to others, specific details pertaining to a person's life' (2010: 62-63). Anonymity and confidentiality become issues for some senior officers or individuals holding unique posts, for example Chief Officers, where the 'possibles' are far fewer in number. With this in mind grouping of some data such as age and the senior rank category were used to help support these concepts.

In securing anonymity for participants no individual was asked for any unique identifier such as their name, e-mail address, posting information or their force warrant or collar number. Further anonymity was afforded by not asking individuals which specific force within the research site they were employed by. Whilst profiling data was captured which could lead to the identification of some individuals who perhaps have an uncommon characteristic, these identifiers would not be used in any final write-up in such a way as to lead to identification. Respondents were allocated a randomly generated identifier for their individual response and three questions asked in the event that the respondent should lose their reference ID. The questions required an individual to provide the first three letters of their mother's maiden name, of the place in which they were born and a date that was memorable to them. These provided a reliable back-up to allow an individual record to be identified in the event the unique ID could not be found, but did not provide sufficient information as to allow an individual to be identified.

The forces involved have also been afforded some level of anonymity by not being expressly referred to. This was done at my suggestion simply to offer some reassurance that should cultural or behaviour issues be revealed then they would not be expressly attributable to any individual force or department. The research site has therefore been referred to in vague terms throughout for this purpose but

with enough context to provide meaningful comparison for the purpose of this work. This approach is similar to that of Loftus (2009) and her study of police culture in 'Northshire'.

Confidentiality was maintained by ensuring all research data collected was securely stored, either within the source questionnaire itself or on a password-protected drive. The data was not copied onto any form of transferable media nor shared electronically in any format which would lead to identification of any individual.

Professional ethical challenges

Whilst ethical dilemmas are a feature of all research, policing research offers some unique challenges (Holdaway, 1983; Punch, 1986; Rowe, 2007; Skins et al., 2016; Westmarland, 2001). As a researcher but also a serving police officer there were some issues where I felt these two roles conflicted.

I felt it important to inform participants not only of my status as a serving police officer, but also of my rank of Sergeant and my role as a Firearms Officer. The rationale for this was not only for the purpose of transparency but also to try and encourage participants and that this was work being undertaken by someone they could perhaps relate to. However, I also wanted to make it clear that they were providing information to not only a police officer but an individual in a supervisory position.

I experienced conflict in relation to my research ethics and my position as a serving officer, particularly in relation to my obligations under the College of Policing Code of Ethics. One issue which was debated was the disclosure of behaviour which may perhaps fall foul of the College's Code of Ethics but which failed to amount to a misconduct or criminal matter, for example if a respondent chose to disclose bullying, racist or sexist behaviour. Under my professional Code of Ethics, I would likely be obliged to report this to the forces concerned as failing to do so would not only mean I would be failing in my duties but also potentially perceived as colluding with research participants in harmful behaviour (Cowburn, 2010). However, given my research was exploring attitudes and culture, particularly in relation to gender

the final position which was settled upon was that any behaviour disclosed as part of the research which amounted to criminal or gross misconduct would be reported to the force, along with any information which presented an immediate threat to an individual, but any other adverse findings which were perhaps unethical or amounted to misconduct only would be kept in confidence. No disclosures of this nature were required however.

Chapter Four: Findings

This research set out to explore the perceptions that exist in, and of, armed policing within England and Wales. Seeking to examine some of the motivations and barriers that encourage or dissuade a police officer from pursuing a career within the armed policing specialism, this chapter will discuss the findings of the research in detail and refer to the sub-questions posed in the research aims, namely:

1) What perceptions of firearms officers exist within policing?
2) What encourages a police officer to become a firearms officer?
3) What discourages a police officer from becoming a firearms officer?

Commencing with a discussion of the research sample by way of the profiling questions contained with the questionnaire (outlined in the Method chapter), it will move on to discuss findings in relation to the concepts of danger and excitement, gendered behaviours and perceptions, armed policing as a career influencer, how AFOs are perceived and issues of individual compatibility with the role.

The research sample demographic

The questionnaire used as the data collection tool for this research was distributed across a number of force areas which share a collaborated armed policing function. The forces have a combined workforce of approximately 4,400 police officers, with females accounting for 32%. At the time of the research (February – March 2019) 126 officers were firearms officers, seven being female. The questionnaire received 287 responses, representing 6.5% of the workforce, and this section will discuss the demographic makeup of those respondents.

Sample by gender

Respondents were asked during profile questions to specify their gender, selecting from options of 'Male', 'Female', 'Other' or 'Prefer not to say'. Males accounted for 226 responses (78.7%) while females accounted for 61 (21.3%). The most recent

Police Workforce statistics show of the total 122,404 police officers across the 43 forces, 36,417 are female, representing 29.8% of the workforce (Home Office, 2018). When considering the force areas involved in this research the percentage of each was close to the force average (32.9%, 31.7% and 29.5%), however female responses to the questionnaire lacked adequate representation to be entirely reflective of the population, which in itself may be indicative of either a lower level of interest of women in armed policing compared to male counterparts, or due in part to the underrepresentation of women within armed policing.

Participants were asked to provide their age, with ages placed into eight categories (Under 20, 20-25, 26-30, 31-35, etc.). Using frequency tables showed the mean age of male and female respondents was similar with males being, on average, 37 years old compared to females being 36.5 years old. The median for both males and females was the '36-40' group. Males had marginally more police service than females, with men having 11.3 years of service compared to the 10.7 years of women which may be accounted for by the age difference between the genders. Appendix D displays the frequency tables for male and female respondents' age and length of service for the calculation of means with Table 3 presenting a summary.

	N	Mean Age (Years)	Mean Length of Service (Years)
Males	226	37.0	11.3
Female	61	36.5	10.7

Table 3: Mean age and length of service of respondents by gender

Respondents were also asked to indicate their current rank, with options ranging from Constable to Chief Officer. Whilst the vast majority of both males and females indicated they were currently working at the rank of Constable (male=83%, female=79%), of those who participated in the research females indicated a slightly higher mean rank with the mode being identical for each (Constable). Whilst 4.4% of male respondents had attained the rank of Inspector or above, 11.4% of females

had achieved the same. Table 4 shows the breakdown of rank of respondents by gender.

	Males		Females	
	n	%	n	%
Constable	188	83.2	48	78.7
Sergeant	28	12.4	6	9.8
Inspector/Chief Inspector	9	4.0	6	9.8
Superintendent/Chief Superintendent	1	0.4	1	1.6
Chief Officer	0	0	0	0
TOTAL	**226**	**100**	**61**	**100**

Table 4: Rank of respondents, by gender

Aggregating all ranks of Inspector and above and utilising a 3x2 contingency table reveals a chi-square value (χ^2) of 4.41 and a p-value of 0.11, which shows that the rank of respondents is not associated with gender ($p > 0.05$). This contingency table is shown at Appendix E.

Sample by AFO/Non-AFO status

Respondents were asked to indicate whether they are currently, or have ever been, an Authorised Firearms Officer (AFO). Of the 287 responses, 34 came from AFOs (11.8%) and 253 came from Non-AFOs (88.2%). Given that AFOs make up only 2.9% of the police officer numbers across the force areas involved in this research, there is a dramatically higher proportional representation of AFOs in the sample than in the population, though this is perhaps unsurprising as it would be expected that a questionnaire on armed policing would be more appealing to those operating and interested in that environment than those outside of it.

Using frequency tables, the mean age of AFOs and Non-AFOs was calculated, which showed the age of AFOs tends to be higher than that of Non-AFOs. AFOs participating in the research had a mean age of 39.1 years old, compared to the younger Non-AFOs who had a mean age of 36.6 years. AFOs are therefore, on average, 2.5 years older than their unarmed counterparts. As well as being older, AFOs indicated a greater length of police service when compared to Non-AFOs, with AFOs having a mean length of service of 14.3 years compared to Non-AFOs' 10.8 years of service.

When comparing AFOs and Non-AFOs in the questionnaire by gender this pattern remained consistent, with male AFOs being on average 2.3 years older than male Non-AFOs and having 3.1 years' more of police service, and female AFOs being 4.2 years older than female Non-AFOs, with 7.6 years' more police service. However, female AFOs accounted for only two responses to the questionnaire and whilst only seven female AFOs work within those forces participating in the research, any conclusions drawn from the responses of female AFOs online should be considered indicative only.

Appendix F contains the frequency tables for age and length of service broken down by AFO/Non-AFO, Male AFO/Male Non-AFO and Female AFO/Female Non-AFO status, and Table 5 provides an overview of the mean age and length of service broken down by demographic as described above, which indicates that AFOs tend to be older officers with greater lengths of police service compared to their Non-AFO counterparts.

	n	Mean Age (Years)	Mean Length of Service (Years)
AFO	34	39.1	14.3
Non-AFO	253	36.6	10.8
Male AFO	32	39.0	14.0
Male Non-AFO	194	36.6	10.9
Female AFO	2	40.5	18.0
Female Non-AFO	59	36.3	10.4

Table 5: Mean age and length of service by AFO/Non-AFO status.

Examining the rank of respondents by AFO/Non-AFO status shows that current and former AFOs tend to be lower-ranked than their Non-AFO counterparts. 33 of the 34 AFOs (97%) who responded are currently working at the Constable or Sergeant rank, with only one individual progressing beyond this and attaining a Superintending rank. By comparison, whilst the vast majority of Non-AFOs also continue to work at the operational ranks of Constable and Sergeant, a greater percentage had progressed further in terms of promotion through the rank structure. Table 6 shows the breakdown of rank for current and former AFOs, compared to Non-AFOs.

	AFOs		Non-AFOs	
	n	%	n	%
Constable	30	88.2	206	81.4
Sergeant	3	8.8	31	12.3
Inspector/Chief Inspector	0	0	15	5.9
Superintendent/Chief Superintendent	1	2.9	1	0.4
Chief Officer	0	0	0	0
TOTAL	**34**	**100**	**253**	**100**

Table 6: Rank by AFO/Non-AFO status

The ethnicity of respondents by AFO/Non-AFO status would indicate that AFOs tend to be overwhelmingly white, with 32 of 34 (94.1%) respondents considering themselves 'White British'. Only one AFO considered themselves of 'Non-White' ethnicity, with another electing not to declare their ethnicity. This high-percentage of white officers is in line with the responses of Non-AFOs, with 234 of 253 respondents (92.5%) considering themselves of 'white' background. These figures appear consistent with the Home Office (2018) statistics that indicate 6.6% of the national workforce identify as BME, although from the responses to this research there is some indication that AFOs suffer more with BME under-representation than Non-AFOs.

Views on armed policing

Participants were asked at the outset of the questionnaire to answer two questions in an attempt to understand views on the routine arming of British Police. These questions asked firstly about views on the current level of AFOs and the need for routine arming, and the second asked about the respondent's exposure to firearms outside of policing.

Chi-square analysis (with Fisher's Exact Test) showed no association between AFO status and views on armed policing (χ^2 = 6.673, p = 0.135). When given options ranging from all officers being armed at all times through to 'lowest' option of the current AFO provision being appropriate the views of AFOs do not differ from those of Non-AFOs. However, the same question produced a statistically significant result when examining an association between gender and the arming of police, with gender having a small-to-medium effect on result (χ^2 = 11.762, p = 0.017, Cramer's V = 0.2). Further analysis of this data produces mean ranks of 171.26 (females) and 136.64 (males), which suggests that males indicate a greater preference for armed policing than females. For this analysis, see Appendix G.

When examining what experience of firearms respondents had outside of policing, when asked to select from five categories ranging from "I am a regular user of firearms/I own a firearm" to "I have never been exposed to firearms", associations were found between firearms experience and AFO status (χ^2 = 17.258, p = 0.001, Cramer's V = 0.3) and gender (χ^2 = 26.965, p = 0.000, Cramer's V = 0.3). AFOs were shown to have more experience of firearms outside of policing compared to Non-AFOs (Mean ranks, AFO = 149.47, Non-AFO = 103.29) and males more experience than females (Mean ranks, males = 132.14, females = 187.95). For this analysis, see Appendix H.

Participants were also asked to what extent they had considered undertaking the role of AFO when applying to join the police, seeking to examine whether any associations existed relating to later career intentions at the point of recruitment. An association was found between respondent gender and inclination to undertake the AFO role (χ^2 = 23.577, p = 0.000, Cramer's V = 0.3) with examination of the frequency distribution (Figure 2) revealing that males were far more inclined to join the police with the intention of pursuing the AFO role than their female counterparts.

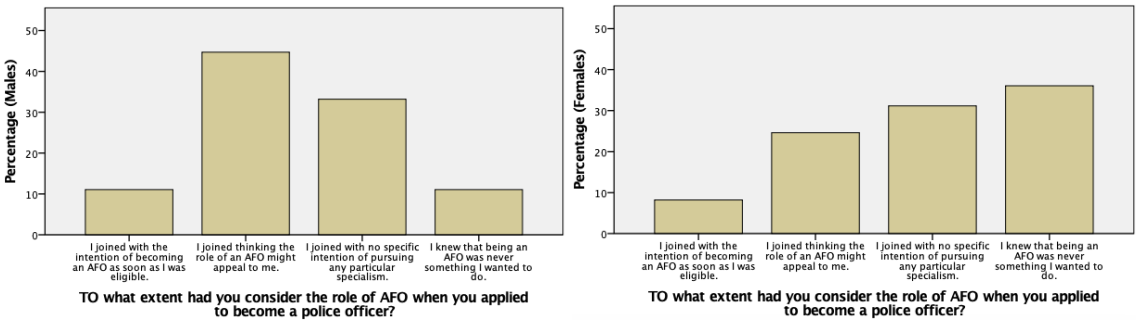


Figure 2: Frequency of responses of "To what extent had you consider the role of AFO when you applied to become a police officer?" by respondent gender.

Danger and Excitement

Marks (2005) found those officers predisposed to thrill-seeking as being more likely to undertake adventurous forms of police work, and so this section is concerned with seeking to examine not only the attitudes of respondents to their perception of danger and excitement, but also their opinion as to whether they consider themselves to be thrill-seekers and whether attitudes toward armed policing as being dangerous act as a barrier or motivation in an individual's decision to become an AFO. The questionnaire asked a number of questions in relation to danger and excitement, including how appealing a respondent felt the phenomena of danger and excitement are, how frequently they feel they are exposed to these, whether they consider themselves to be a thrill-seeker, and whether armed policing is any more or less dangerous than other forms of police work.

Self-identification as a 'thrill-seeker'

Respondents were asked to indicate on a 5-point scale, how much they agreed with the statement "I consider myself to be a thrill-seeker", ranging from 'Strongly Disagree' to 'Strongly Agree'. This question was posed to try and understand the respondent's own perception and self-identification of thrill-seeking and whether they are aware of their tendency to pursue those sorts of opportunity that may be considered 'thrilling', drawing upon the terminology and findings of Marks (2005). Analysis of this question shows that the majority of respondents (56%) disagreed, or strongly disagreed with this statement. Only 14.6% of respondents agreed or strongly agreed that they considered themselves to be thrill-seekers, with the

remaining 29.3% of respondents neither agreeing or disagreeing with the statement. The distribution of responses to this question is shown below in Figure 3.

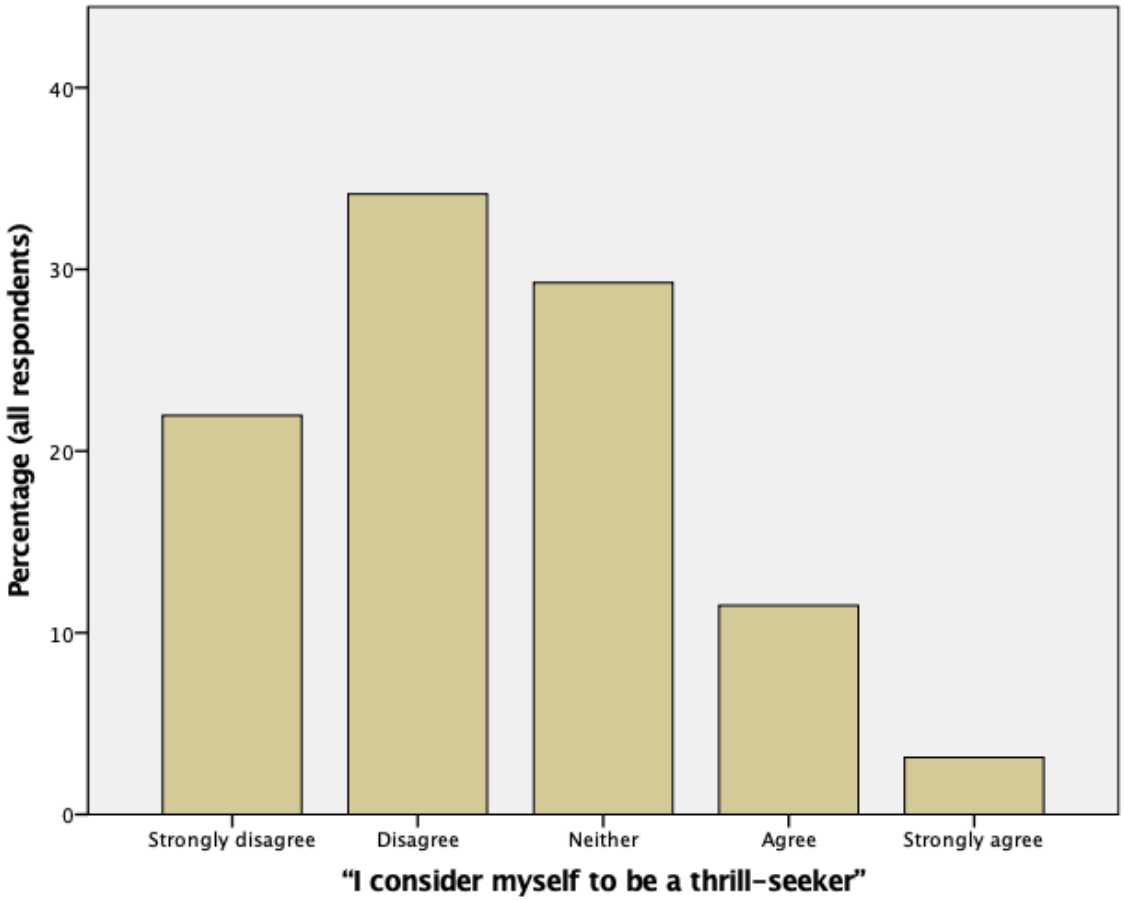


Figure 3: Frequency of responses to statement "I consider myself to be a thrill-seeker" (all respondents, n = 287).

Using a chi-square analysis of the response to this question, attitudes towards thrill-seeking were explored in the context of respondents' AFO status. The proportions of AFOs and Non-AFOs who disagreed that they considered themselves to be thrill-seekers was largely comparable, however an overwhelming proportion of AFO respondents (41.2%) opted to neither agree nor disagree with the statement, making this the most popular response for AFOs within the research sample. Only one AFO indicated any level of agreement with the statement.

As outlined in the Methods section, chi-square was used with Fisher's Exact Test applied due to the expected number of counts being less than five. This analysis showed that a chi-square test for independence (with Fisher's Exact Test) indicated

acceptance of the null hypothesis, i.e. no association between AFO status and self-identification as a thrill-seeker ($\chi^2 = 4.80$, p = 0.28). This analysis output is shown at Appendix I and the frequency distribution of responses by AFO status is shown below in Figure 4, with the contingency table for observed and expected frequencies shown at Table 7.

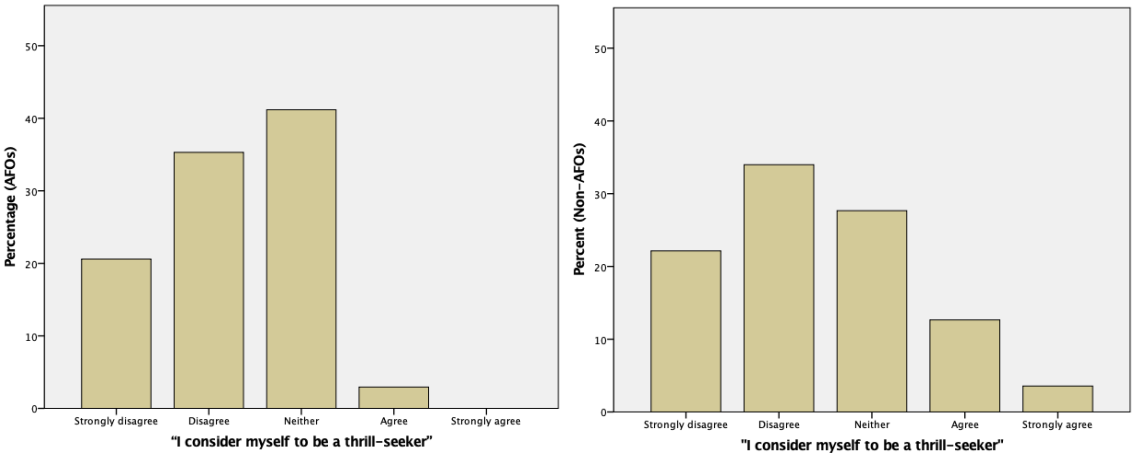


Figure 4: Comparison of frequency distribution to the statement "I consider myself to be a thrill-seeker", by AFO (left, n = 34) and Non-AFO (right, n = 253) respondent status.

			UA is thrill seeker					
			Strongly disagree	Disagree	Neither	Agree	Strongly agree	Total
Current or former AFO	No	Count	56	86	70	32	9	253
		Expected Count	56.0	86.0	70.0	32.0	9.0	253.0
		% within Current or former AFO	22.1%	34.0%	27.7%	12.6%	3.6%	100.0%
Total		Count	56	86	70	32	9	253
		Expected Count	56.0	86.0	70.0	32.0	9.0	253.0
		% within Current or former AFO	22.1%	34.0%	27.7%	12.6%	3.6%	100.0%

Table 7: Contingency table of observed and expected frequencies for response to "I consider myself to be a thrill-seeker", by AFO status.

Despite the acceptance of the null hypothesis, comparison of the frequency distributions side-by-side does indicate a weaker sense of self-identification amongst AFOs than with Non-AFOs, where a greater percentage of respondents indicated some form of 'thrill-seeker' status by way of agreement. However, the conclusion from this data suggests that AFOs are no more likely than Non-AFOs to self-identify as thrill-seekers.

This finding is similar when exploring self-reflective attitudes toward thrill-seeking when comparing males and females, in that no association was made between gender and self-identification of thrill-seeker status. The percentage of men and women who disagreed or strongly disagreed that they considered themselves thrill-seekers was almost identical across both genders, and whilst a greater percentage of males agreed or strongly agreed that they considered themselves to be thrill-seekers (15.5%), compared to females (11.5%), chi-square analysis (with Fisher's Exact Test) showed no significant association ($\chi^2 = 1.12$, $p = 0.90$) – see Appendix J).

Attitudes toward danger in the AFO role

Questions were asked of respondents aimed at exploring attitudes toward the danger faced by AFOs, and whether any differences existed which may indicate misconceptions or barriers to recruitment.

Respondents were asked to score their level of agreement with the statement "The work of AFOs is more dangerous than most other aspects of policing", on a 5-point scale ranging from 'Strongly Disagree' to 'Strongly Agree'. Whilst analysis shows that AFOs are more likely to disagree or strongly disagree with this statement (58.9%) compared to Non-AFOs (45.6%), chi-square analysis (with Fisher's Exact Test) shows no association between AFO status and the opinion of how dangerous the role is ($\chi^2 = 5.31$, $p = 0.23$ – see Appendix K).

When respondents were asked to consider how dangerous they considered their current role a consistent result emerged insofar as frequency of exposure to danger was not considered to have a significant association as to whether the respondent's current role was an AFO or not ($\chi^2 = 5.822$, $p = 0.190$). However, whilst the threshold for significance was not met, AFOs did indicate that they believed they were more frequently exposed to danger than those in unarmed roles. Figure 2 shows the percentage of AFOs and Non-AFOs and how they scored the frequency with which they felt they were exposed to danger on a 5-point scale ranging from 'Very Little' to 'Very Often'.

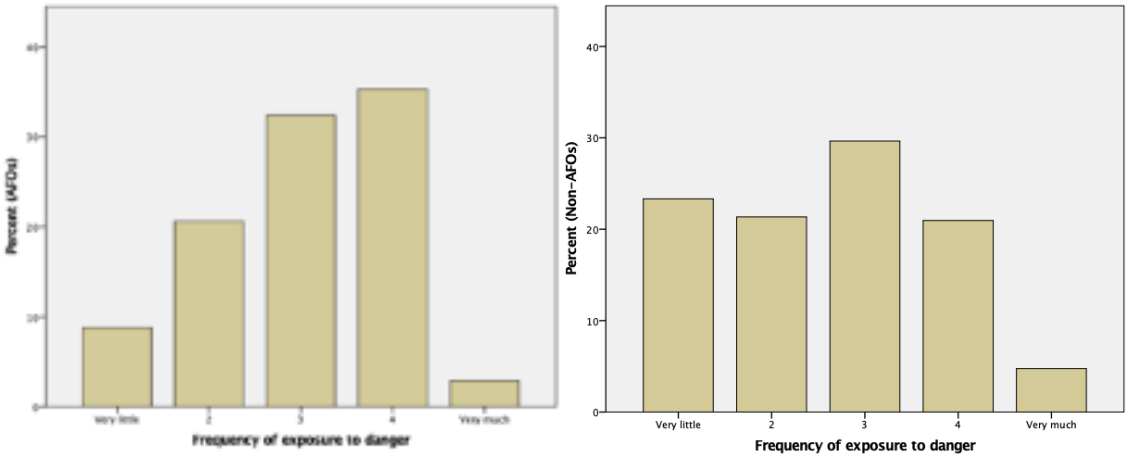


Figure 5: Frequency with which respondents felt they were exposed to danger, by AFO status.

Figure 5 illustrates that the results of AFOs are negatively skewed, with AFOs tending to feel they are exposed to danger more frequently. Non-AFOs meanwhile indicated they felt they were exposed less frequently to danger, although a greater percentage of Non-AFOs than AFOs felt they were exposed to danger 'Very Often'. Calculating means from Figure 2 shows that AFOs scored the frequency with which they were exposed to danger as 3.0/5, as opposed to Non-AFOs who scored it 2.6/5, where 1 = 'Very Little' and 5 = 'Very Often' in relation to exposure to danger.

When considering the frequency with which respondents felt they were exposed to danger in the context of gender, accepting the caution required when utilising the mean with ordinal data (as outlined in the Methods chapter), males gave a mean score of 2.7/5 compared to females' 2.4/5, suggesting females who participated felt they faced danger slightly less frequently than their male colleagues. Figure 6 illustrates the response of males and females in terms of the frequency of exposure to danger as a percentage.

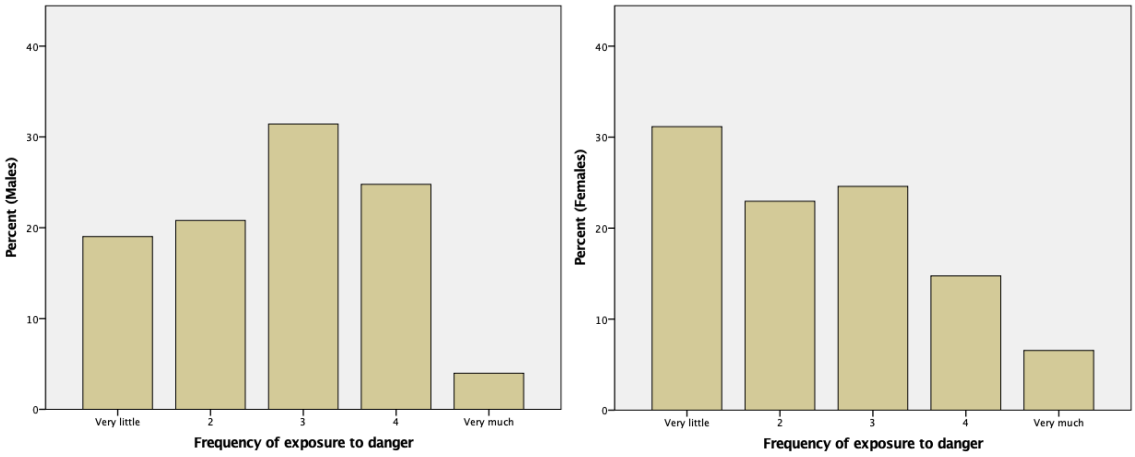


Figure 6: Frequency with which respondents felt they were exposed to danger, by gender.

However, as with AFO status, no association was found between gender and the frequency with which respondents felt they are exposed to danger in their current role (χ^2 = 7.011, p = 0.128).

These results, which suggest the perception of danger is not associated to AFO status or gender, is supported by the response to the statement "AFOs are more at risk of serious harm than officers in most other roles". No association was found between the perception of elevated risk of harm to AFOs, and AFO status (χ^2 = 1.090, p = 0.916) or gender (χ^2 = 2.304, p = 0.688). The indication when considering these results holistically therefore, is that Non-AFOs do not consider being an AFO any more dangerous than those actually undertaking the role, nor is the perception of the dangers any different based upon gender.

Attitudes toward excitement in the AFO role

In much the same way as thrill-seeking and excitement were themes to be explored, questions were also asked in relation to excitement. Participants were asked to determine how exciting they felt their current role is, and in the case of Non-AFOs to give a view on how exciting they perceived the AFO role to be.

No association was found between AFO status and the perception of excitement of the AFO role (χ^2 = 3.773, p = 0.422), nor was an association found between gender and perception of excitement of the AFO role (χ^2 = 1.716, p = 0.796). When comparing the AFO role to other roles within policing, again no association was

found between AFO status (χ^2 = 6.498, p = 0.133) or gender (χ^2 = 3.341, p = 0.501) and how the excitement of being an AFO compared to other policing roles. The indication therefore is that the AFO role is not perceived as any more or less exciting by those actually undertaking the role compared to those with no AFO experience, nor does the concept of excitement in context of armed policing differ based on gender.

Danger and excitement as a motivation and barrier

AFOs were asked to score how strongly they agreed with the two statements "I found the danger / excitement offered by the AFO role appealing to me" in an attempt to understand how these two concepts motivated an individual to apply for the role. The findings of this indicated that AFOs found the *excitement* offered by the AFO role far more appealing than the *danger* offered by the role, with 64.7% of respondents agreeing the excitement was appealing, compared to only 17.6% of respondents agreeing that the danger was appealing. Figure 7 shows the frequency distribution of these responses for comparison.

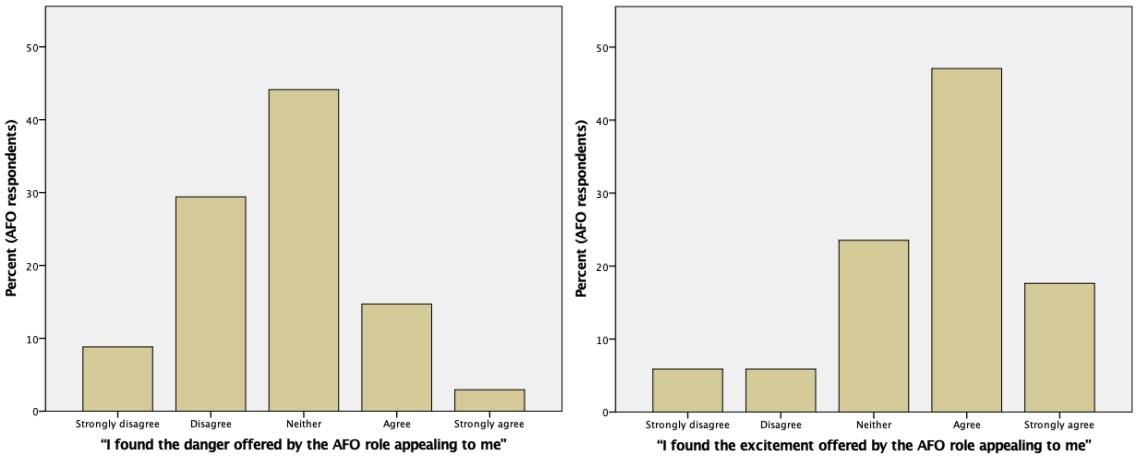


Figure 7: Comparison of frequency distribution for AFO responses (n = 34) to the statements "I found the danger offered by the AFO role appealing to me" (left) and "I found the excitement offered by the AFO role appealing to me" (right)

This indicates that it is the *excitement* of the AFO role rather than the *danger* of the AFO role that acted as an appealing feature in pursuing this career which is further supported by interpretation of both the mode (danger = 3, excitement = 4) and

median (danger = 3.00, excitement = 4.00). This finding may indicate that AFOs do not consider 'excitement' and 'danger' as being equivalent constructs.

In contrast, Non-AFOs were asked to rate their agreement (1 = 'Strongly Disagree', 5 = 'Strongly Agree') with the statement "The danger I would be exposed to played a part in my decision not to become an AFO" to understand whether danger was a significant influencer in dissuading individuals from applying for the AFO role. Responses to this question showed a strong positive skew with emphasis on disagreement with this statement and a mode of 1 ('Strongly disagree'). Figure 8 shows the frequency distribution for Non-AFO responses to this question (n = 34).

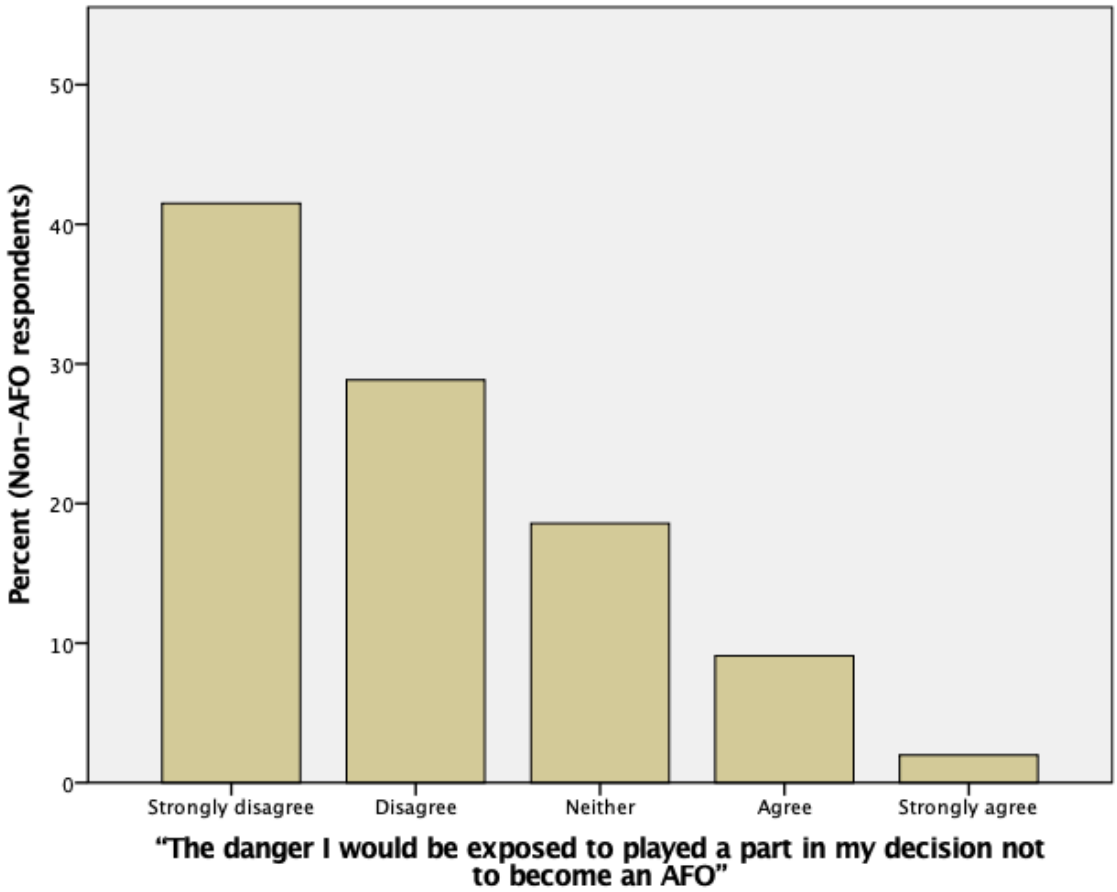


Figure 8: Frequency distribution of Non-AFO responses when asked to agree with the statement "The danger I would be exposed to played a part in my decision not to become an AFO".

There was also found to be no association between the gender of Non-AFOs and how strongly they felt danger played a part in the decision not to become an AFO (χ^2 =6.330, p = 0.157).

Gendered behaviours and policing

In 1995 Brown and Sargent found that only 2.6 per cent of AFOs nationally were women, with 5 per cent of forces having none whatsoever. Whilst the number of female AFOs nationally has increased since that time, the research site used here had seven female AFOs out of a total establishment of 126 at the time of the research, representing a percentage of 5.6 per cent. With specific management focus on the equal opportunities for women, whether the increase has been sufficient over the preceding 25 years as to be considered satisfactory remains in question.

Brown and Sargent's research went on to explore the motivation of men and women to join firearms teams and found that despite interest levels being almost identical (five out of ten men saying they may become an AFO compared to four out of ten women), reasons were given for women being considered 'unsuitable', ranging from lacking in adequate strength and other physiological challenges, to the biological such as premenstrual syndrome and the psychological abilities such as having adequate 'aggression' or 'ability to kill'.

As described in the Methods chapter, part of this research used the Bem Sex-Role Inventory (BSRI) as a tool for assessing the desirability of a number of behaviour or personality traits. Unbeknown to the participant these traits were classified as being masculine, feminine or neutral in their nature, as discussed previously, and were presented to a random order. Participants were asked to rate how desirable they considered each trait in both a Police Officer (i.e. the core or generic officer role), and in the specialist role of AFO. The difference in how desirable these behaviour traits are has been analysed based on participant gender and by AFO status.

Desirability of behaviours in the role of police officer – by gender

When analysing the desirability of behaviours in a police officer it was found that association based on the participant's gender was found in six out of the 24 traits, that is to say, the view of how desirable a behaviour is in a police officer only varied based on gender, in six cases. A table of results for all χ^2 and p-values for each trait is shown at Appendix L (analysed by respondent gender) and Appendix M (analysed by respondent AFO status). The six behaviours which were dependent upon gender were 'tender' (feminine), 'gentle' (feminine), 'sensitive to the needs of others' (feminine), 'aggressive' (masculine), 'secretive' (neutral) and 'friendly' (neutral). Each of these will now be summarised below.

'Tender'

Analysis of the desirability of the behaviour trait of 'tender' in a police officer showed an association between gender and desirability, with a small-to-medium effect size (χ^2 = 14.935, p = 0.013, Cramer's V = 0.2). Figure 9 below compares the frequency distribution of male and female responses.

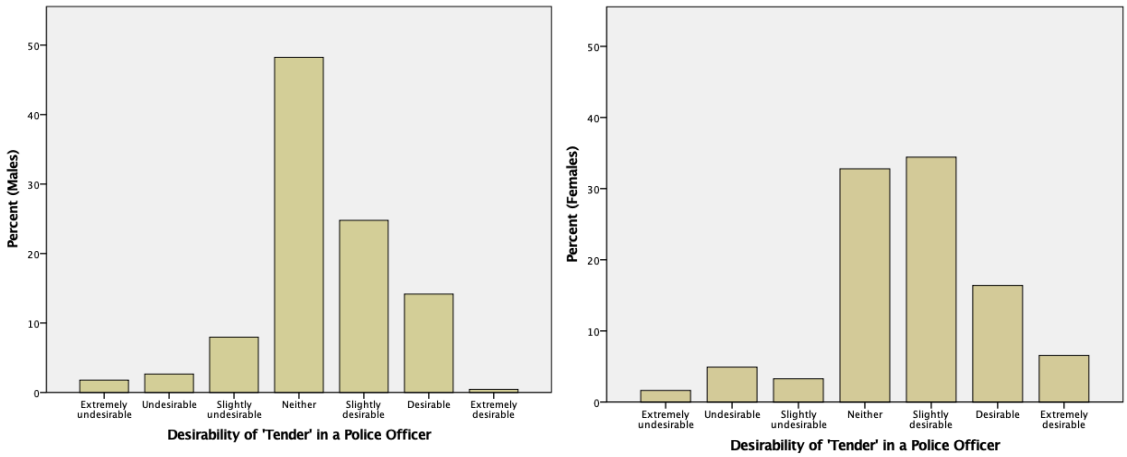


Figure 9: Frequency distribution of the desirability of 'tender' in a police officer, by gender.

Comparison of the frequency distribution indicates that females consider tenderness to be a more desirable quality in a police officer than males do. This is supported by analysis of the result by way of Mann-Whitney U test, which also produced a statistically significant difference in desirability scoring between males and females (U = 8,168, p = 0.019), with mean ranks of 138.36 and 164.90 respectively.

'Gentle'

Analysis of the desirability of the behaviour trait of 'gentle' in a police officer showed an association between gender and desirability, with a medium effect size (χ^2 = 21.006, p = 0.001, Cramer's V = 0.3). Figure 10 below compares the frequency distribution of male and female responses.

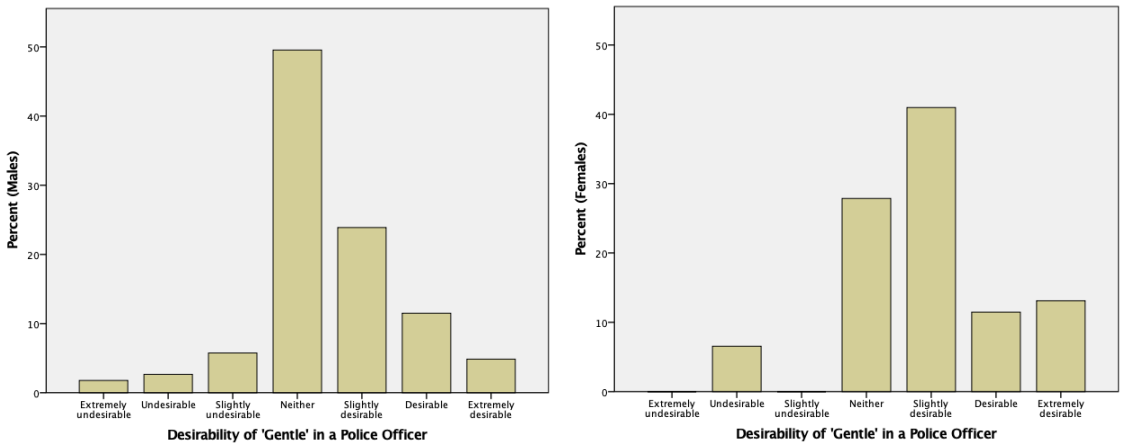


Figure 10: Frequency distribution of the desirability of 'gentle' in a police officer, by gender.

Comparison of these frequency distributions reveal similar findings as those of 'tender', with regard to male respondents, with a 'narrow' shape suggesting a small standard deviation and a significant number of responses being neutral. The female response by comparison shows a higher desirability for the trait, which is supported by way of Mann-Whitney U test, which also produced a statistically significant difference in desirability scoring between males and females (U = 8,599, p = 0.002), with mean ranks of 136.45 and 171.97 respectively.

'Sensitive to the needs of others'

Analysis of the desirability of the behaviour trait of 'sensitive to the needs of others' in a police officer showed an association between gender and desirability, with a medium effect size (χ^2 = 16.359, p = 0.005, Cramer's V = 0.3). Figure 11 below compares the frequency distribution of male and female responses.

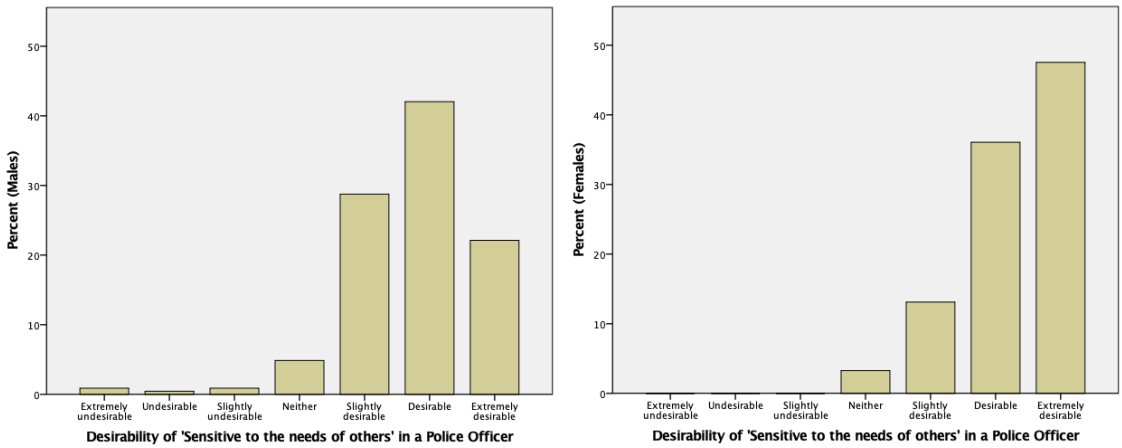


Figure 11: Frequency distribution of the desirability of 'sensitive to the needs of others' in a police officer, by gender.

Both distributions indicate a level of positive desirability for both males and females, with a negative skew being apparent. The skew is more apparent for females suggesting indicating the direction of variance being that females consider the trait more desirable than males. This is supported by analysis by way of Mann-Whitney U test which produced a statistically significant difference in desirability score (U = 9,065, p = 0.000) and mean ranks for males and females of 134.39 and 179.61 respectively.

'Aggressive'

Analysis of the desirability of the trait 'aggressive' in police officers indicated association with gender, with a medium effect size (χ^2 = 20.949, p = 0.001, Cramer's V = 0.3). The frequency distribution of these responses is shown below in Figure 12.

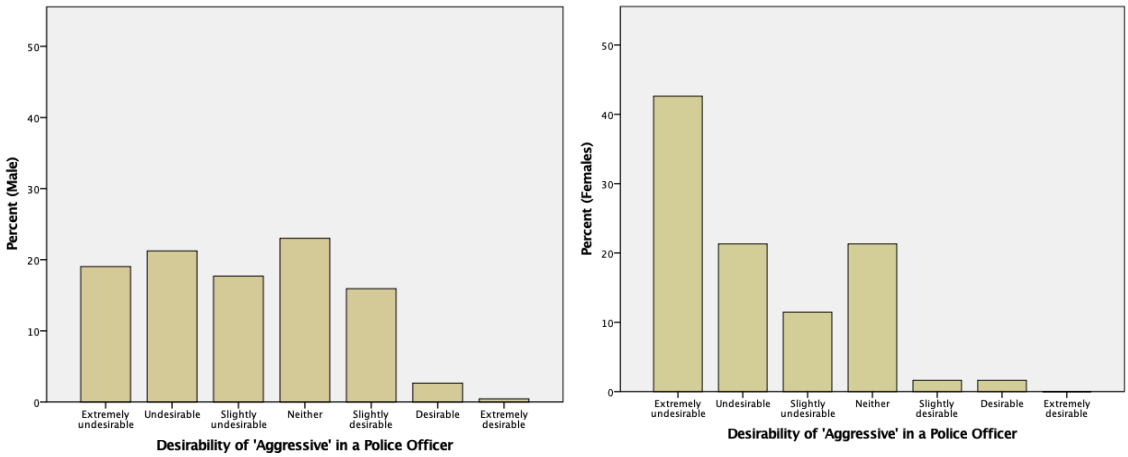


Figure 12: Frequency distribution of the desirability of 'aggressive' in a police officer, by gender.

The distribution of male respondents indicates a much more even spread of responses across the desirability scale, however the distribution of female responses indicates a more traditional positive skew. Whilst males tend to lean toward the 'undesirable' end of the scale in the same way as females, the female responses are more heavily weighted toward undesirability. This preference, i.e. females consider the trait less desirable than males, is supported by analysis through Mann-Whitney U testing, which produced a statistically significant difference in scoring (U = 4,671, p = 0.000), with mean ranks for males and females of 153.83 and 107.57 respectively. When considering behavior traits in the context of desirability in a police officer, 'aggressive' is the trait with the most significant difference in mean rank between males and females.

'Secretive'

Analysis of how desirable this behavior trait was in a police officer also indicated an association with the gender of the respondents, with a small-to-medium effect size (χ^2 = 15.423, p = 0.013, Cramer's V = 0.2). The frequency distribution for comparison is shown below in Figure 13.

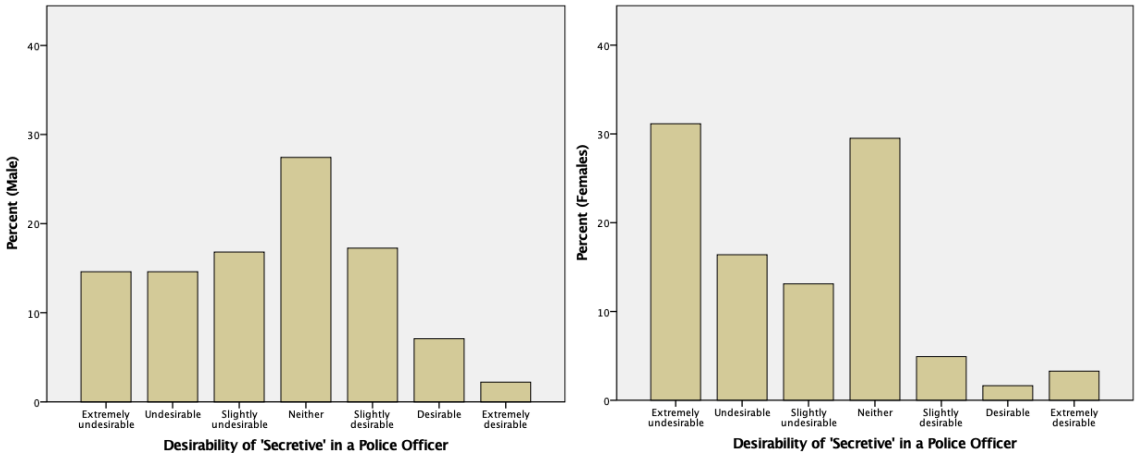


Figure 13: Frequency distribution of the desirability of 'secretive' in a police officer, by gender.

The frequency distributions for the responses to the desirability of this trait indicate a shape similar to that of a normal distribution for male respondents, i.e. a clustering around the mid-point. Alternatively, the frequency distribution for female respondents indicates a positive skew, with the most popular response being that of 'Extremely Undesirable'. Responses to the questionnaire therefore indicates that there is an association between an individual's gender and how desirable they consider this trait to be, and that females view it as less desirable than males. This is further supported through testing by way of Mann-Whitney U analysis which indicates a statistically significant difference in scoring (U = 5,135, p = 0.002), with mean ranks for males and females of 151.78 and 115.18 respectively.

'Friendly'

Analysis of the desirability of the trait 'friendly in police officers indicated association with gender, with a small-to-medium effect size (χ^2 = 12.812, p = 0.016, Cramer's V = 0.2). The frequency distribution for responses, by gender, is shown below at Figure 14.

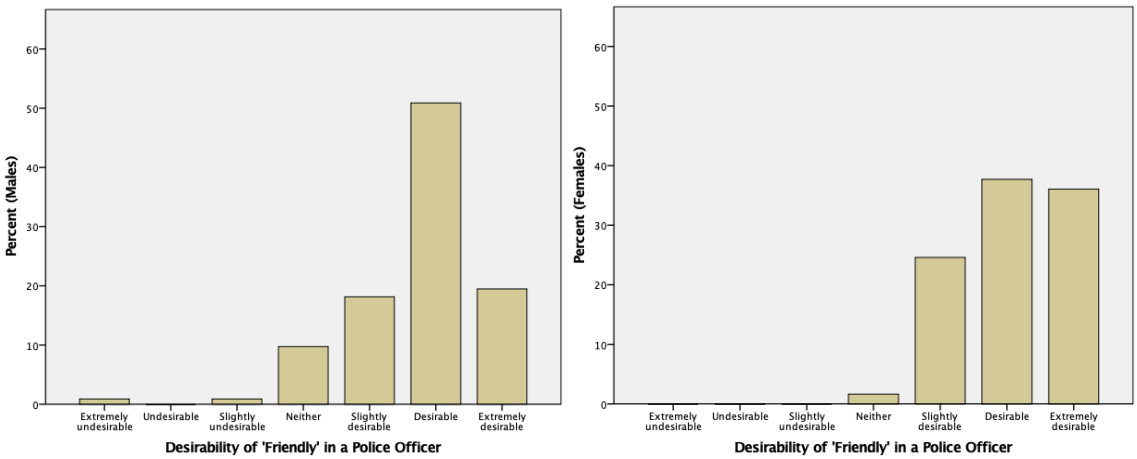


Figure 14: Frequency distribution of the desirability of 'friendly' in a police officer, by gender.

Comparison of the frequency distribution for responses to the desirability of 'friendly' as a trait in police officers shows a strong indicator for being desired by both genders, however the strength of feeling differs. Whilst both males and females consider the trait desirable, responses to the questionnaire indicate that females consider the trait more desirable than their male colleagues, with not a single female respondent indicating any sense of undesirability. This is supported by Mann-Whitney U test analysis (U = 8,064, p = 0.029) which produced mean ranks for males and females of 138.82 and 163.20 respectively.

Desirability of behaviours in the role of police officer – by AFO status

In the same way as described above, the desirability of behaviour traits in a police officer have also been analysed for comparison by respondent's AFO status. Unlike the analysis by gender, analysis by way of AFO status produced half as many instances of association between desirability and AFO status. In this case only three of the 24 traits produced significant differences; 'dominant' (masculine), 'forceful' (masculine) and 'aggressive' (masculine). A summary of the comparison analysis for all traits by AFO status, with chi-square and p-values, is shown at Appendix M, and below is an explanation of findings for those three behaviours which indicated association.

'Dominant'

The analysis of how desirable the trait of 'dominant' is in a police officer produced evidence of an association with respondent AFO status, with a medium effect size (χ^2 = 15.632, p = 0.009, Cramer's V = 0.3). The frequency distribution of questionnaire responses by AFO status is shown below at Figure 15.

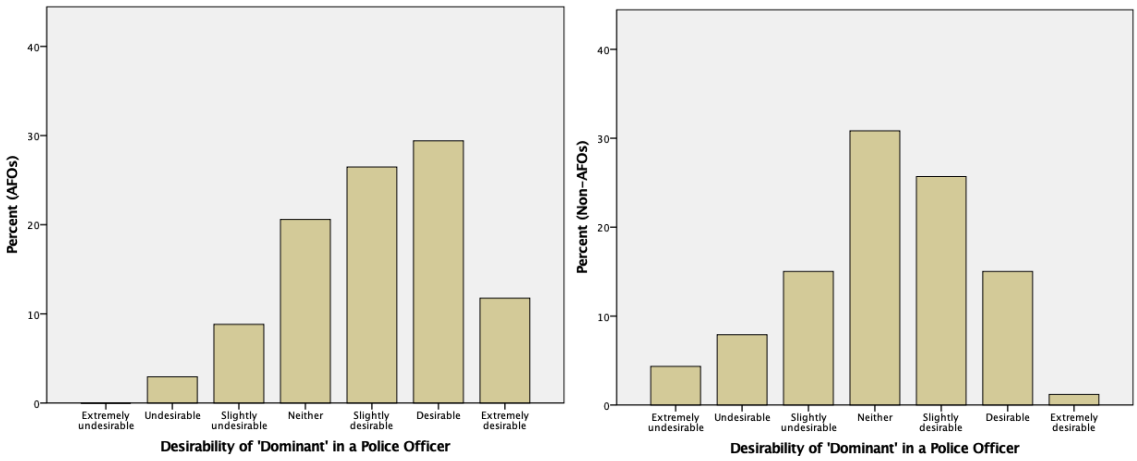


Figure 15: Frequency distribution of the desirability of 'dominant' in a police officer, by AFO status.

Comparing the frequency distribution of responses to the question would appear to indicate that AFOs consider the trait of 'dominant' as being more desirable in a police officer compared to their Non-AFO colleagues. This is supported by analysis by way of Mann-Whitney U test, which produces a statistically significant difference in scoring (U = 2,743.5, p = 0.000) with mean ranks of 189.81 and 137.84 for AFOs and Non-AFOs respectively.

'Forceful'

Analysis of questionnaire responses to how desirable the trait of 'forceful' is in a police officer also produced a finding of association by AFO status, with an effect size of small-to-medium (χ^2 = 14.561, p = 0.014, Cramer's V = 0.2). Figure 16 shows the frequency distribution of questionnaire responses by respondent AFO status.

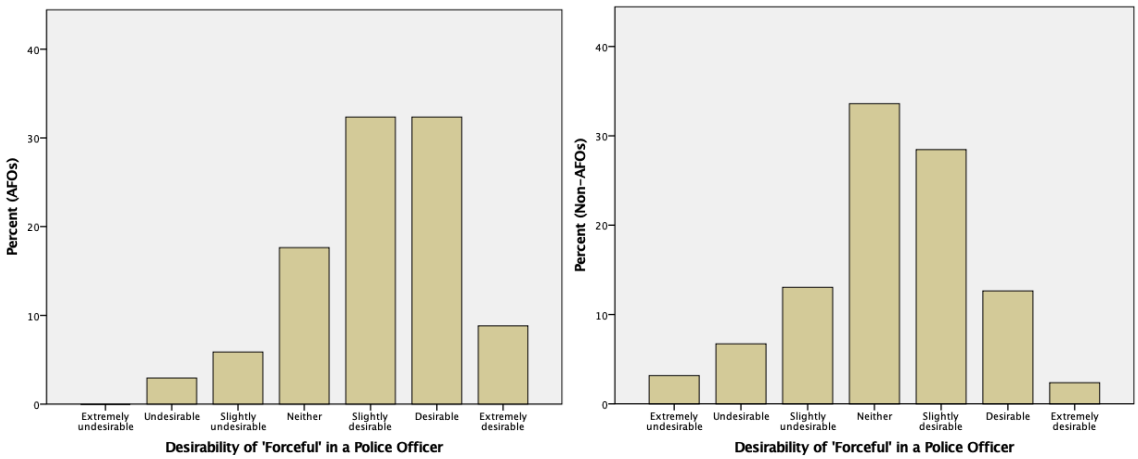


Figure 16: Frequency distribution of the desirability of 'forceful' in a police officer, by AFO status.

Whilst the distribution of responses clearly indicates that 'forceful' is considered by both AFOs and Non-AFOs as a desirable trait in a police officer, the findings indicate that AFOs consider it to be more desirable than Non-AFOs. Analysis by way of Mann-Whitney U test produced a statistically significant difference in scoring (U = 2639.5, p = 0.000) with mean ranks for AFOs and Non-AFOs being 192.87 and 137.43 respectively. This difference in mean ranks represents the biggest difference between AFO and Non-AFO rankings on the desirability of any behaviour trait in a police officer ($\Delta = 55.44$).

'Aggressive'

The analysis of responses to how desirable respondents considered the trait 'aggressive' to be in a police officer produced an association between desirability and AFO status, with a small-to-medium effect size ($\chi^2 = 14.990$, p = 0.014, Cramer's V = 0.3). Figure 17 below compares the frequency distribution of AFO and Non-AFO responses.

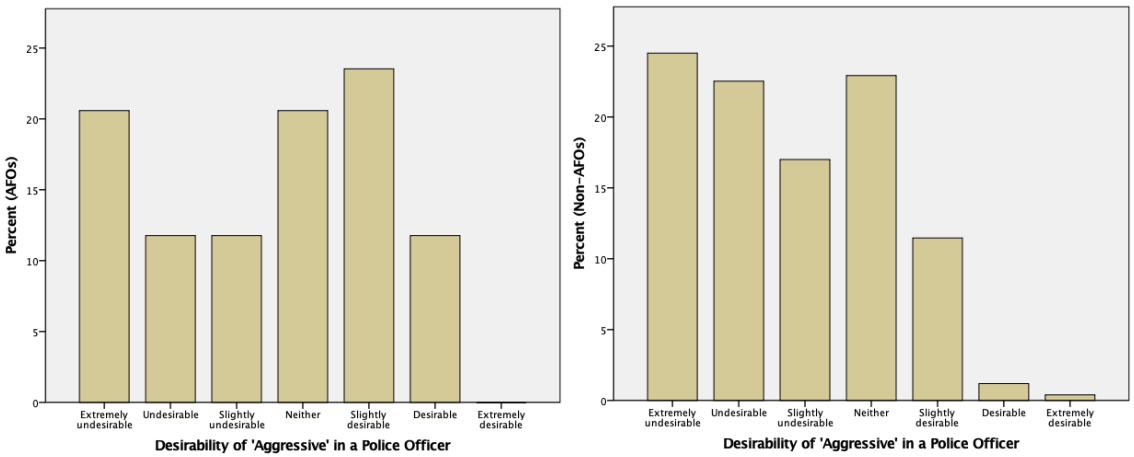


Figure 17: Frequency distribution of the desirability of 'aggressive' in a police officer, by AFO status.

Whilst the frequency distribution for AFO does not indicate an obvious trend toward desirability or undesirability, the distribution of responses from Non-AFOs is suggestive of a positive skew with a direction toward the trait being considered to some extent undesirable. Comparison by way of Mann-Whitney U test produces a statistically significant difference in scoring (U = 3,246, p = 0.018) with mean ranks of 175.03 and 139.83 for AFOs and Non-AFOs respectively. This supports the finding that AFOs consider the trait of 'aggressive' to be more desirable in police officers than their Non-AFO counterparts.

Desirability of behaviours in the role of AFO – by gender

In the same way that participants were asked to consider how desirable they considered certain behaviours in the role of a police officer, so too were they asked to consider the desirability of those same traits in the specialist role of AFO. The intention was to compare whether the views of participants changed when considering these behaviours in the context of general policing compared to the context of armed policing in an attempt to understand which behaviours, if any, were perceived as more desirable within the specialism and to further consider the gendered nature of the culture of armed policing.

The analysis of the data followed the same process as previously described for the consideration of desirability in a police officer, with a chi-square analysis utilised to identify associations between the gender and AFO status of respondents. Appendix

N and Appendix O provide a summary of the chi-square and p-values for gender and AFO comparisons respectively. Analysis for association between gender and desirability of traits in an AFO found that associations existed in three of the 24 traits; 'aggressive' (masculine), 'conscientious' (neutral) and 'secretive' (neutral).

'Aggressive'

An association was found between gender and the desirability of 'aggressive' as a trait in AFOs, with an effect size of small-to-medium ($\chi^2 = 16.612$, p = 0.008, Cramer's V = 0.3). The frequency distribution of responses by gender are shown below at Figure 18.

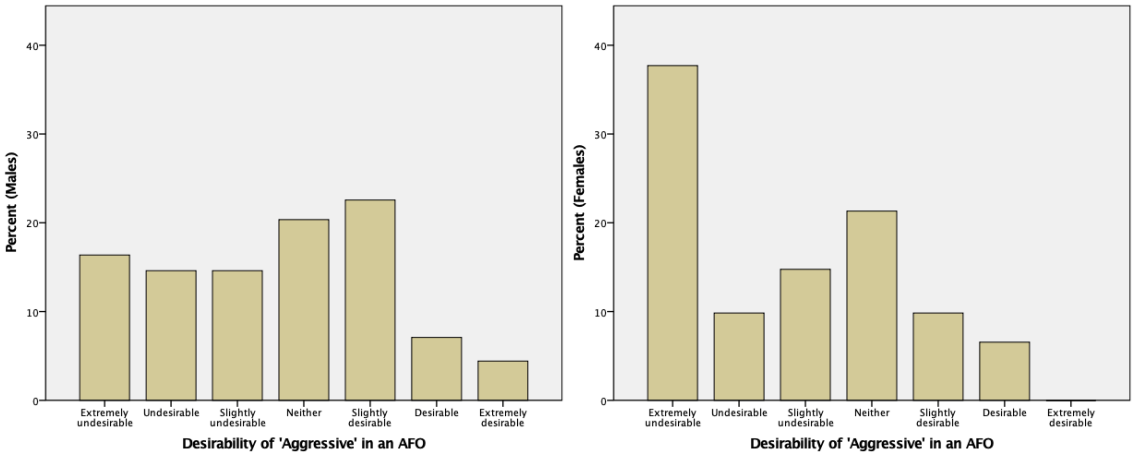


Figure 18: Frequency distribution of the desirability of 'aggressive' in an AFO, by gender.

The frequency distribution above indicates that males consider the trait of 'aggressive' as being more desirable in an AFO than females, with 62.3% of females indicating some form of 'undesirability' compared to 45.6% of males. Analysis by way of Mann-Whitney U test supports this, with a statistically significant difference shown (U = 5,042, p = 0.001) and mean ranks for males and females of 152.19 and 113.66 respectively.

'Conscientious'

Analysis showed association between gender and respondent views on the desirability of the trait of 'conscientious' in an AFO, with a small-to-medium effect

size (χ^2 = 16.043, p = 0.007, Cramer's V = 0.2). The frequency distribution of responses is shown at Figure 19.

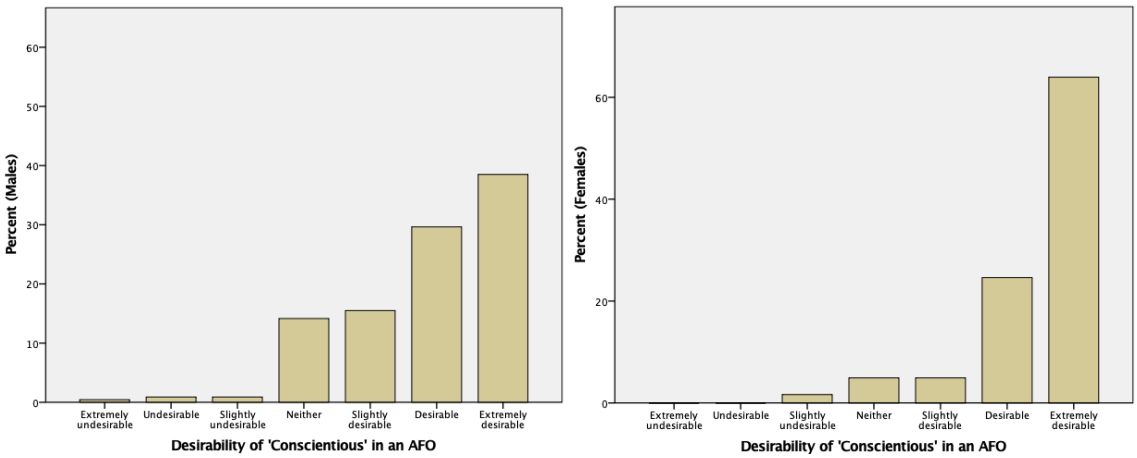


Figure 19: Frequency distribution of the desirability of 'conscientious' in an AFO, by gender.

Whilst comparison of the frequency distribution of responses for both males and females indicates a strong negative skew (i.e. indicating that both groups consider the trait to be desirable), there is a marked difference in the strength of opinion, with females seemingly considering 'conscientious' to be not only desirable, but more desirable than their male colleagues. This is supported by comparison by way of Mann-Whitney U test, which presents a finding of a statistically significant difference in scores (U = 8,930.5, p = 0.000), with the mean rank of females being higher (177.40) than the mean rank of males (134.98).

'Secretive'

The final behaviour trait which indicated an association between its desirability in an AFO and the participant's gender was that of 'secretive', with an effect size of small-to-medium (χ^2 = 13.316, p = 0.031, Cramer's V = 0.2). Figure 20 displays the frequency distributions of responses for males and females.

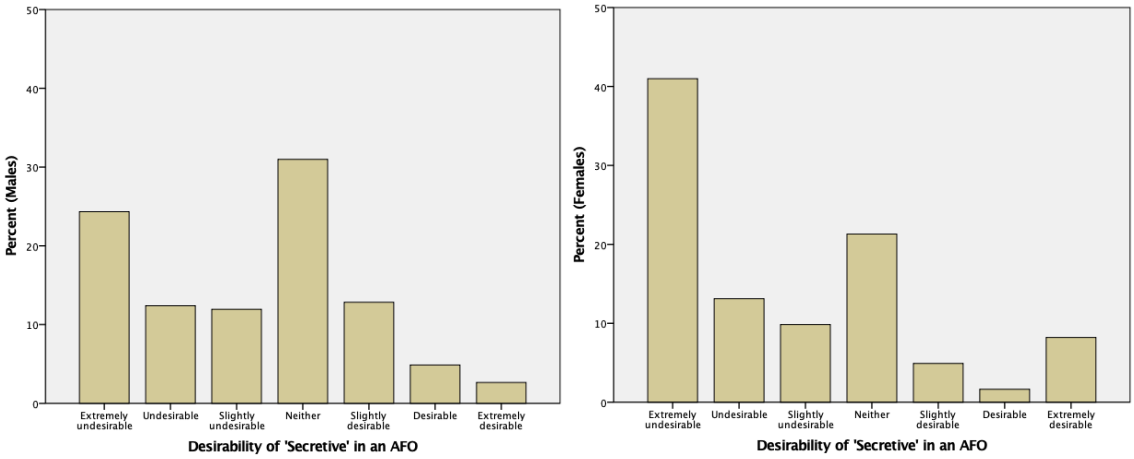


Figure 20: Frequency distribution of the desirability of 'secretive' in an AFO, by gender.

The frequency distribution indicates that females consider the trait of 'secretive' to be a less desirable trait in an AFO than males, which is supported by analysis of the responses by way of Mann-Whitney U test which produces a statistically significant difference in score between the two groups (U = 5,616.5, p = 0.023), with mean ranks for males and females of 149.65 and 123.07 respectively.

Desirability of behaviours in the role of AFO – by AFO status

Analysis of how desirable respondents considered the behaviour traits in the role of an AFO was also undertaken by way of chi-square test. A summary of the chi-square and p-values is shown at Appendix O. This analysis produced only one instance of association between the AFO status of respondents and the desirability of a behaviour; that trait was 'gentle' (feminine).

Analysis of the responses in relation to this behaviour trait, in the context of desirability in an AFO, produced an association with the respondent's gender, with a small-to-medium effect size (χ^2 = 12.636, p = 0.029, Cramer's V = 0.2). The frequency distribution of responses by AFO status is shown at Figure 21.

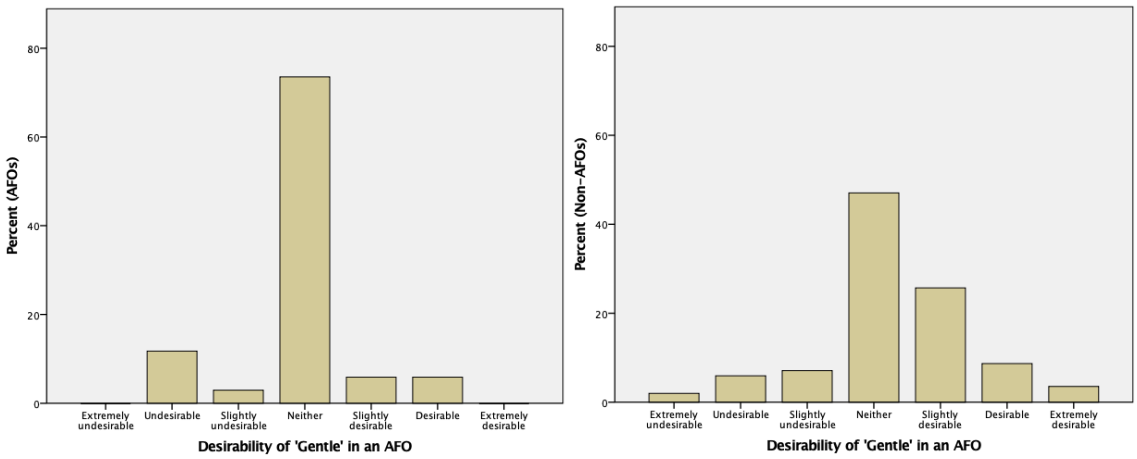


Figure 21: Frequency distribution of the desirability of 'gentle' in an AFO, by AFO status.

Both distributions indicate a preference around the neutral response, with the majority of respondents indicating that the trait of 'gentle' in an AFO is neither desirable nor undesirable. However, application of the Mann-Whitney U test produces a statistically significant difference in scoring across the two groups (U = 5,240.5, p = 0.026) with the mean ranks for AFOs and Non-AFOs being 116.37 and 147.71 respectively. This finding suggests that whilst the (un)desirability of the trait scores relatively neutral, AFOs consider it to be less desirable in the role than Non-AFOs.

Gender and AFO effectiveness

As detailed above, respondents were asked to give their opinion on individual and specific behavioural traits. When considering the role of AFO, gender and AFO status played less of a role in influencing opinion on levels of desirability than when considering the 'core' police officer role, as shown by the presence of fewer associations. Participants in the questionnaire were also asked to state their level of agreement with the statement "men are more effective as AFOs than women" in an attempt to identify any differences or associations which perhaps were not captured through the individual trait analysis.

Analysis of the responses to this question showed no association between the views of how effective men are in comparison to women, and either the respondent's gender (χ^2 = 4.448, p = 0.322) or AFO status (χ^2 = 6.036, p = 0.169). Likewise, no statistically significant difference in scoring for this question were shown.

Perceptions of armed policing culture

A study by Page (1991) found that an informal bar existed that excluded women from armed policing, with women themselves indicating an unwillingness to volunteer and a perception that physical and strength requirements meant women were unsuitable. In addition, rather than being the absence of a motivation to become an AFO, Brown and Sargent found it to be "aspects of police culture and embedded individual and organizational attitudes which inhibit women from becoming firearms officers" (1995:13).

Part of the research questionnaire included questions exploring respondent perceptions of the culture of armed policing units, including how accessible they felt the specialism was to 'outsiders', how welcome an individual felt they would be onto a team of AFOs, how representative the specialism is and perceptions about the role from a gender perspective. The findings from these questions are discussed below.

Accessibility of armed policing units

Participants were asked to indicate their perception of the accessibility of armed policing units on a five-point scale from 1 (highly inaccessible) to 5 (highly accessible). Analysis showed no association between gender and perceived accessibility (χ^2 =3.067, p = 0.531) however association was shown between perceived accessibility and AFO status, with a medium effect size (χ^2 = 19.899, p = 0.000, Cramer's V = 0.3). Of the Non-AFO responses (n = 253), 11.1% of responses indicated a perception of accessibility, compared with 52.2% who indicated inaccessibility. By contrast AFO responses (n = 34) showed 38.2% indicated some level of accessibility, compared with 29.4% indicating inaccessibility. Figure 22 shows the frequency distribution for the perception of accessibility by AFO status.

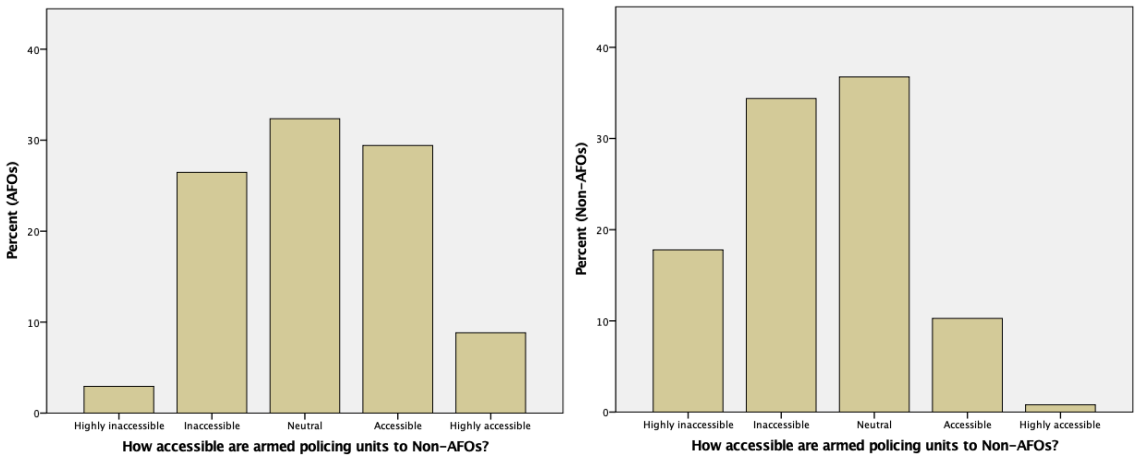


Figure 22: Frequency distribution of the responses to "How accessible are armed policing units to Non-Firearms Officers?", by respondent AFO status.

Comparison of the frequency distribution suggests that whilst there is no clear indication from AFOs that they consider their own unit to be accessible to Non-AFOs – as displayed by the normal distribution of responses, Non-AFOs have indicated a perception of 'inaccessibility'. This finding is perhaps unsurprising, given those who have achieved acceptance into any subculture may then fail to see the barriers presented to non-members, however the indication from Non-AFOs of the inaccessible nature of armed policing units may be presenting a barrier to recruitment.

Responses of Non-AFOs were broken into genders (male = 194, female = 59) to see whether there was any association between perception of accessibility and gender within the Non-AFO sample. No association was found (χ^2 =1.924, p = 0.752), suggesting that if the perception of accessibility is presenting a barrier to Non-AFOs, then it is as equal a barrier for men as it is women. The full chi-square analysis for responses to this question is shown at Appendix P.

Individual acceptance into the role of AFO

Participants were asked to indicate whether they agreed or disagreed with the statement "Someone like me would be welcomed onto a team of AFOs". Deliberately vague, this question was intended to explore how the individual felt about how they would fit into the culture of armed policing. Analysis of the responses indicated two

features of association; respondent gender and respondent disability status. The chi-square results for both categories are shown at Appendix Q.

Comparison of results by gender indicated an association with how welcome the individual felt they would be within a team of AFOs, with a small-to-medium effect size (χ^2 = 12.888, p = 0.010, Cramer's V = 0.2). Males (n = 226) were more likely to agree that they would be welcome within armed policing than females (n = 61), as shown in Figure 23.

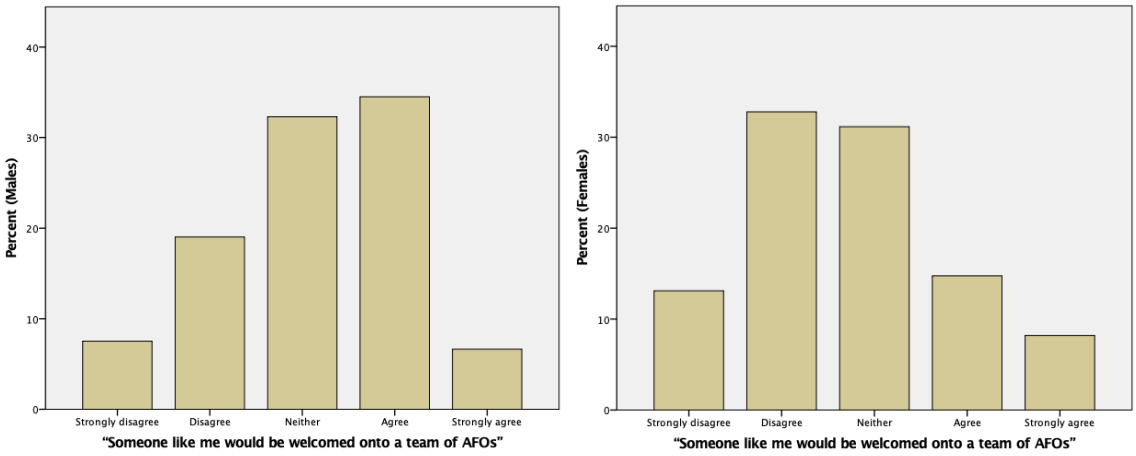


Figure 23: Frequency distribution of the responses to "Someone like me would be welcomed onto a team of AFOs", by respondent gender.

This finding, that males are more likely than women to feel they would be welcome on a team of AFOs, is supported by analysis of the data by way of Mann-Whitney U test. This analysis indicated a statistically significant difference in scores between males and females on this question (U = 5,312, p = 0.004), with mean ranks of 151.00 and 118.08 respectively.

Exploring further the acceptance into the AFO role of men and women, participants were also asked for their level of agreement with the statement "Women fit in well onto firearms units". This question also revealed an association with gender, with a medium effect size (χ^2 = 20.453, p = 0.000, Cramer's V = 0.3). The frequency distribution for males and females is shown at Figure 24 and indicates that males agree more than females on this point, with Mann-Whitney U test analysis providing

a statistically significant difference in scoring (U = 5,599, p = 0.15) and mean ranks for males and females of 149.73 and 122.79 respectively.

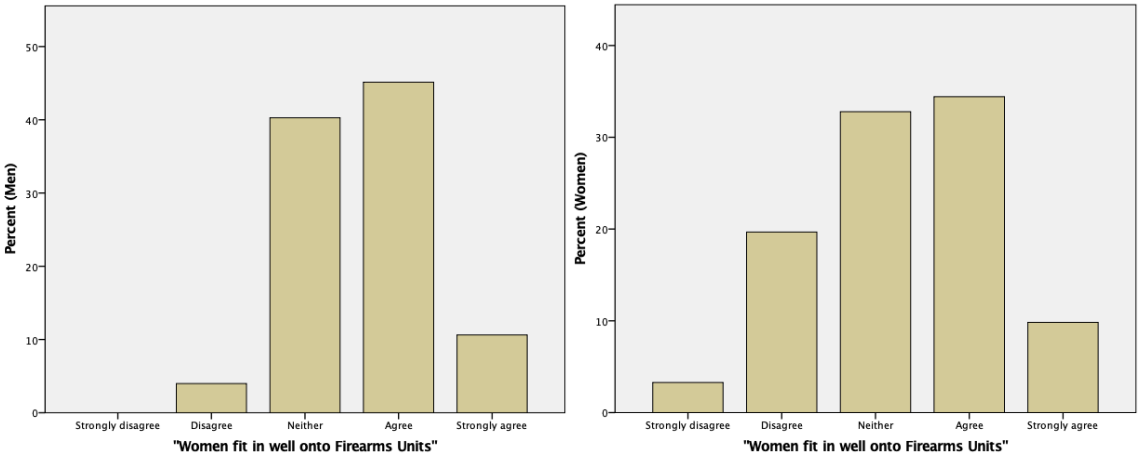


Figure 24: Frequency distribution of the responses to "Women fit in well onto firearms units", by respondent gender.

In exploring the reasons for varying feelings of acceptance, participants were also asked to state whether they felt the AFO role is 'macho'. The analysis indicated an association between gender and perception of the AFO role as 'macho', with an effect size of small-to-medium (χ^2 = 16.204, p = 0.002, Cramer's V = 0.2). Analysis of the responses showed that females agree more than males that the AFO role is 'macho', with mean ranks for males and females of 136.40 and 172.17 respectively. Mann-Whitney U testing provided a statistically significant difference in scores (U = 8,611.5, p = 0.002). The frequency distribution for responses is shown below at Figure 25.

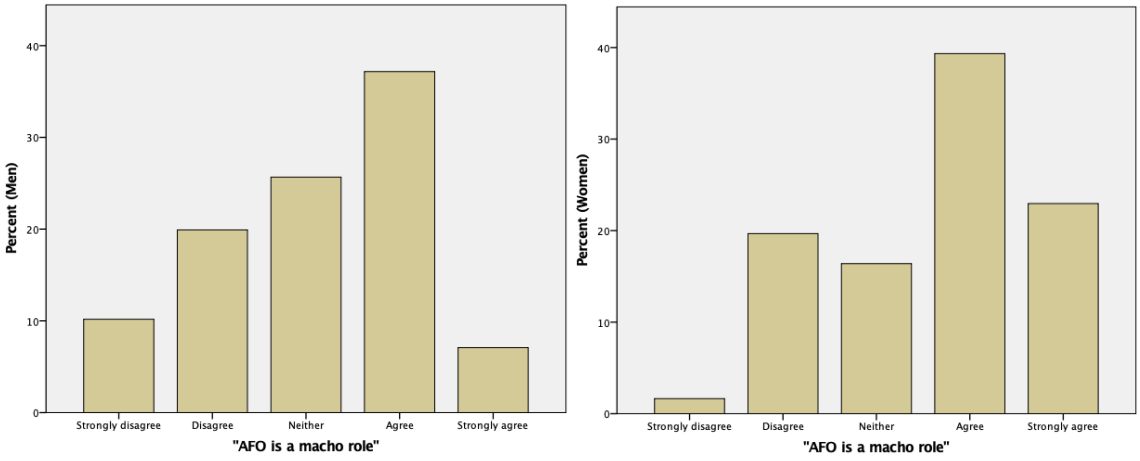


Figure 25: Frequency distribution of the responses to "AFO is a macho role", by respondent gender.

These findings, in the context of gender comparison, therefore support the view that females are less likely to feel welcome on a team of AFOs, are less likely to feel they will fit in well, and that the role is still perceived by females to be 'macho' in its nature.

In addition to findings relating to feelings of acceptance and gender, acceptance into the role of AFO in the context of disability also revealed an association. Comparison of those respondents who indicated they had a disability (n = 27) and those who did not (n = 252) found an association with a medium effect size (χ^2 = 16.069, p = 0.002, Cramer's V = 0.3). Figure 26 shows the frequency distribution for both groups and indicates a positive skew for those who answered affirmatively to having a long-standing illness or disability, compared to the negative skew of those who answered negatively. This finding suggests that those who identified as having a disability felt they would be less welcome on a team of AFOs than those without.

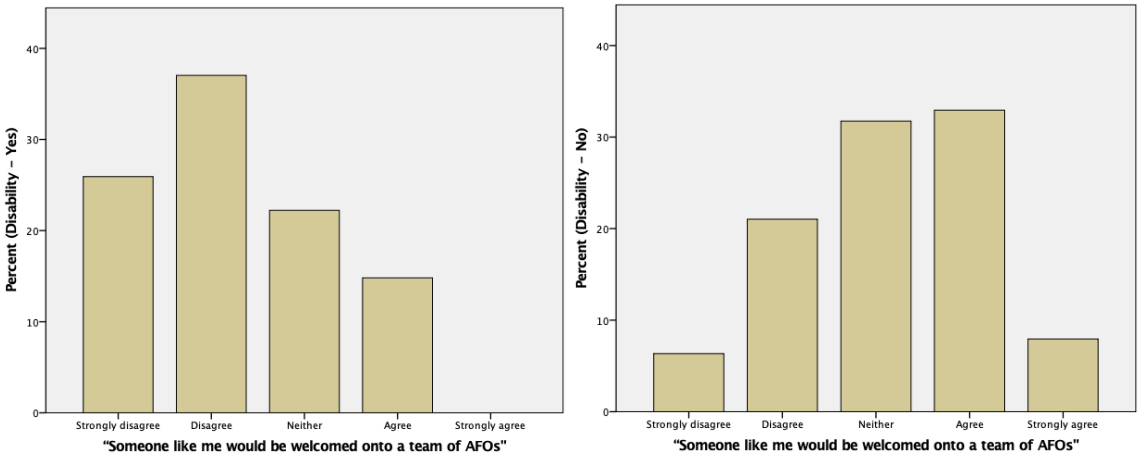


Figure 26: Frequency distribution of the responses to "Someone like me would be welcomed onto a team of AFOs", by respondent's disability status.

The finding is supported by Mann-Whitney U testing, which indicates a statistically significant difference in score between the groups (U = 4,907, p = 0.000) with mean ranks for disabled and non-disabled respondents of 84.26 and 145.97 respectively.

Perceptions of armed policing culture

Respondents were asked to indicate to what extent – if any – their perception of culture within armed policing may have played a part in their decision or pursue, or

discount, a career as an AFO. AFOs were asked to indicate their agreement with the statement "The culture within armed policing I found appealing", whilst Non-AFOs were asked "The culture of armed policing puts me off applying to become an AFO".

The responses from AFOs is shown below in Figure 27, with 50% of AFOs indicating the culture they found appealing, compared with 26.4% who indicated some level of disagreement. The remaining 23.5% answered in the neutral. Accepting the arguments discussed in the Methods chapter for using the averaging of data produced from Likert scales, all are supporting of showing an indication in favour of agreement, that the culture within armed policing is considered appealing by AFOs (mean = 3.26, median = 3.50, mode = 4).

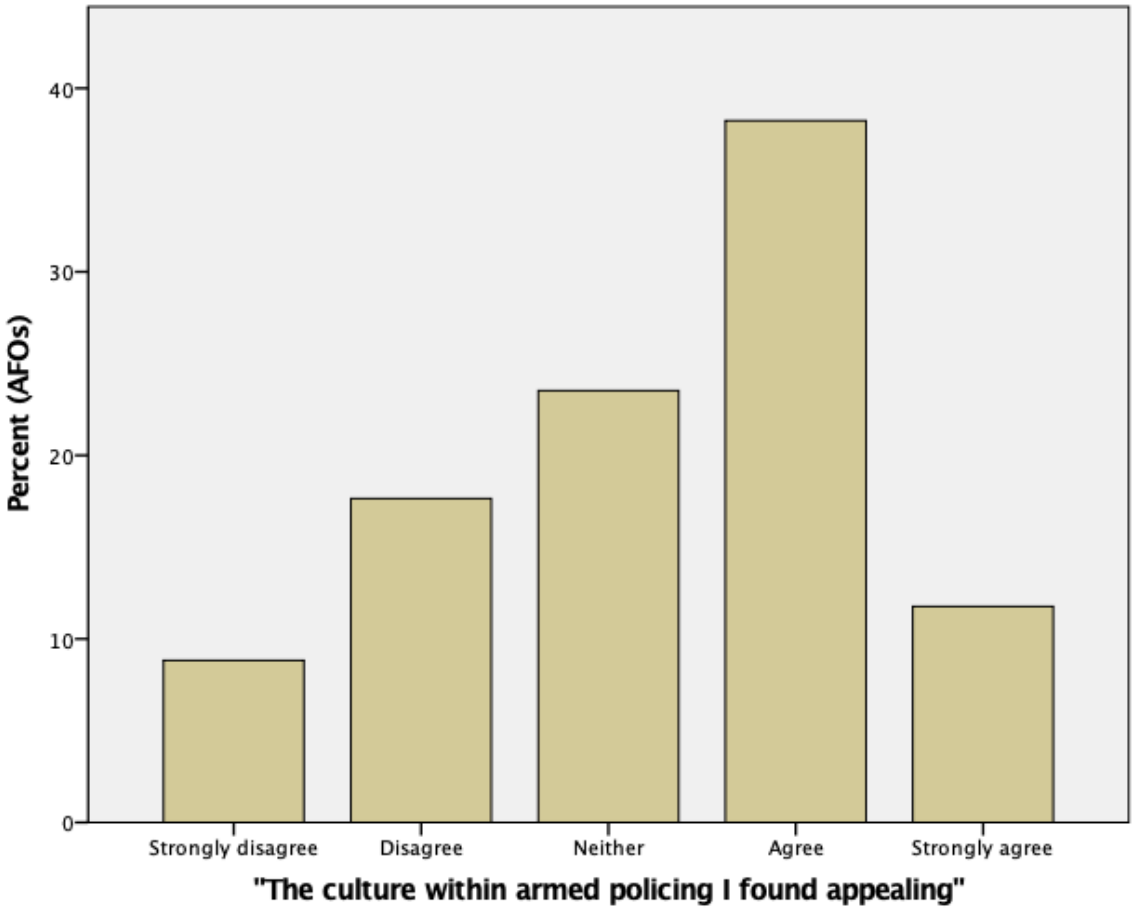


Figure 27: Frequency distribution for AFO agreement responses to "The culture within armed policing I found appealing".

In contrast, and in trying to understand to what extent the perception of armed policing culture acts as a barrier to becoming an AFO, the frequency distribution for

Non-AFO responses to culture acting to dissuade individuals from becoming an AFO is shown in Figure 28. The responses suggest that perceptions of armed policing culture do not act as a strong barrier to AFO recruitment, with almost as many Non-AFOs indicating agreement (36.4%) as indicated disagreement (40.3%. This indication is supported by the mean (2.97), median (3.00) and mode (2) for the responses.

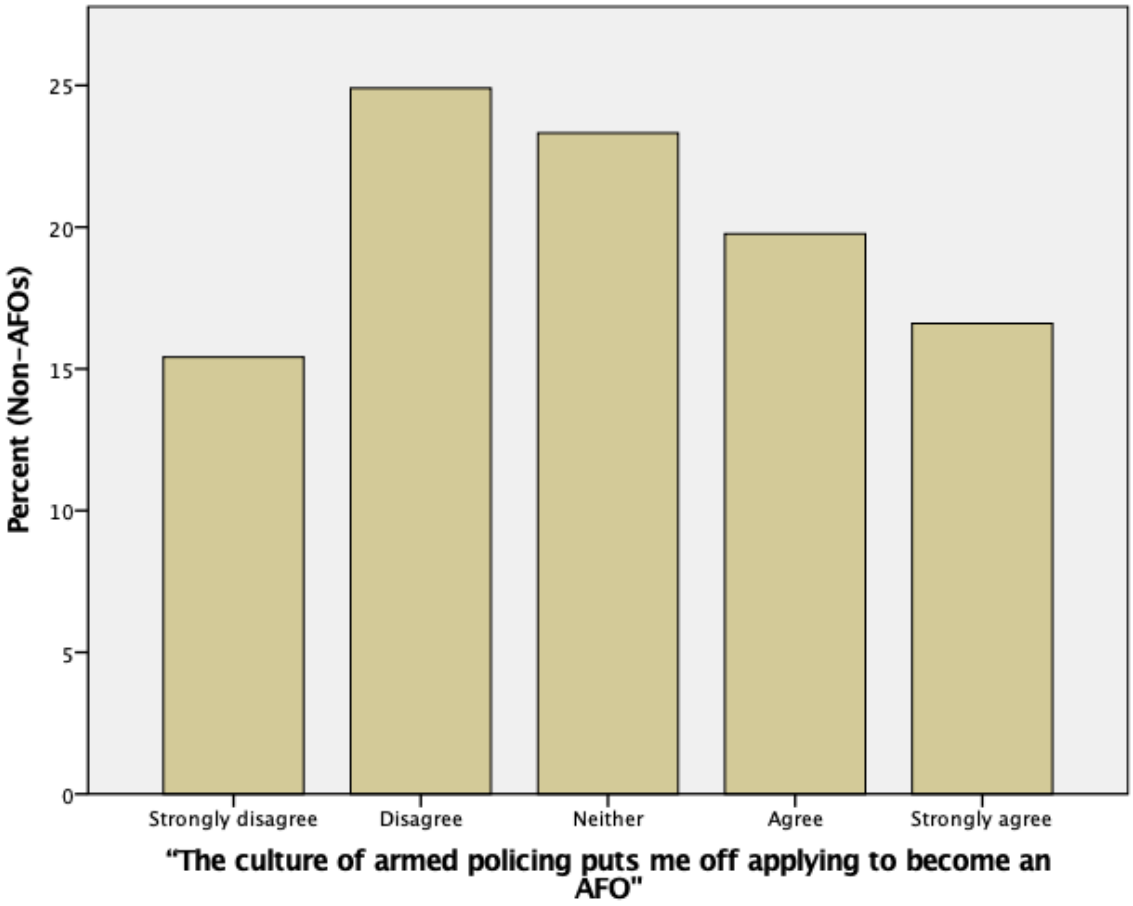


Figure 28: Frequency distribution for Non-AFO agreement responses to "The culture of armed policing puts me off applying to become an AFO".

Armed policing as a career influencer

One of the common topics written about in literature when discussing police culture and a police officer's orientation to work, is that of promotion prospects and career development (Loftus, 2009; Reiner, 1978; Westmarland, 2001). Part of this research was therefore focused on exploring the motivations of individuals to become a police officer but also their motivations to pursue a specific specialism in the context of prospects of a fulfilling career. From an armed policing perspective questions

were asked to determine what role, if any, the career prospects and perceived status of an AFO played in the decision to pursue the specialism.

Motivation to become a police officer

Using the work of Jones (2013) respondents were asked to select from a list of 'types' of applicants and joining motivations, to indicate which most closely aligned with their reason for becoming a police officer. These options, as put forward by Jones, were:

1. "I have always been fascinated by what the police do and had always wanted to be a police officer from as far back as I could remember. As a child, I had dressed up as a police officer and had all of the police paraphernalia. By applying to join the police, I was taking steps to fulfil my childhood dream." (The Childhood Dreamer)

2. "I wanted to avoid a desk job and was attracted by the prospect of driving fast cars, chasing criminals and locking up the bad guys on a daily basis." (The Excitement Chaser)

3. "I wanted to give back to society and help people who were vulnerable and unable to help themselves. Becoming a police officer was seen as a logical way to achieve these personal motivational desires." (The Good Samaritan)

4. "I was drawn to policing because of the good salary, pension and career prospects on offer. I did not see policing as a vocation, but rather the best option out of a list of careers that I had considered pursuing." (The Sensible Seeker)

5. "I had completed a degree and thought that my degree would provide me with leverage to climb the ranks through the high potential development scheme offered by the police." (The Graduate)

6. "I felt that my life was not going in the direction that I had hoped and I could see myself engaging in activities that may have gotten me in trouble. Applying to the police was therefore motivated by a belief that it would provide some discipline and focus and enable me to get 'back to the straight and narrow.'" (The Dysfunctional)

7. "I became a police officer after several other different careers and roles and saw a move into policing as a logical next step in the hope of achieving fulfilment." (The Drifter)

8. "I had been a volunteer Special Constable, alongside another full-time career, and wanted to 'upgrade' to become a full-time police officer." (The Special)

9. "I cannot remember my motivation for joining."

While no association was found between these motivations and the AFO status of respondents ($\chi^2 = 5.979$, $p = 0.615$) examination of the frequencies of responses do suggest some differences could exist particularly in relation to the motivation of fulfilling a 'childhood dream of policing'. Figure 29 below compares the frequency distribution for AFOs and Non-AFOs in relation to motivation for becoming a police officer.

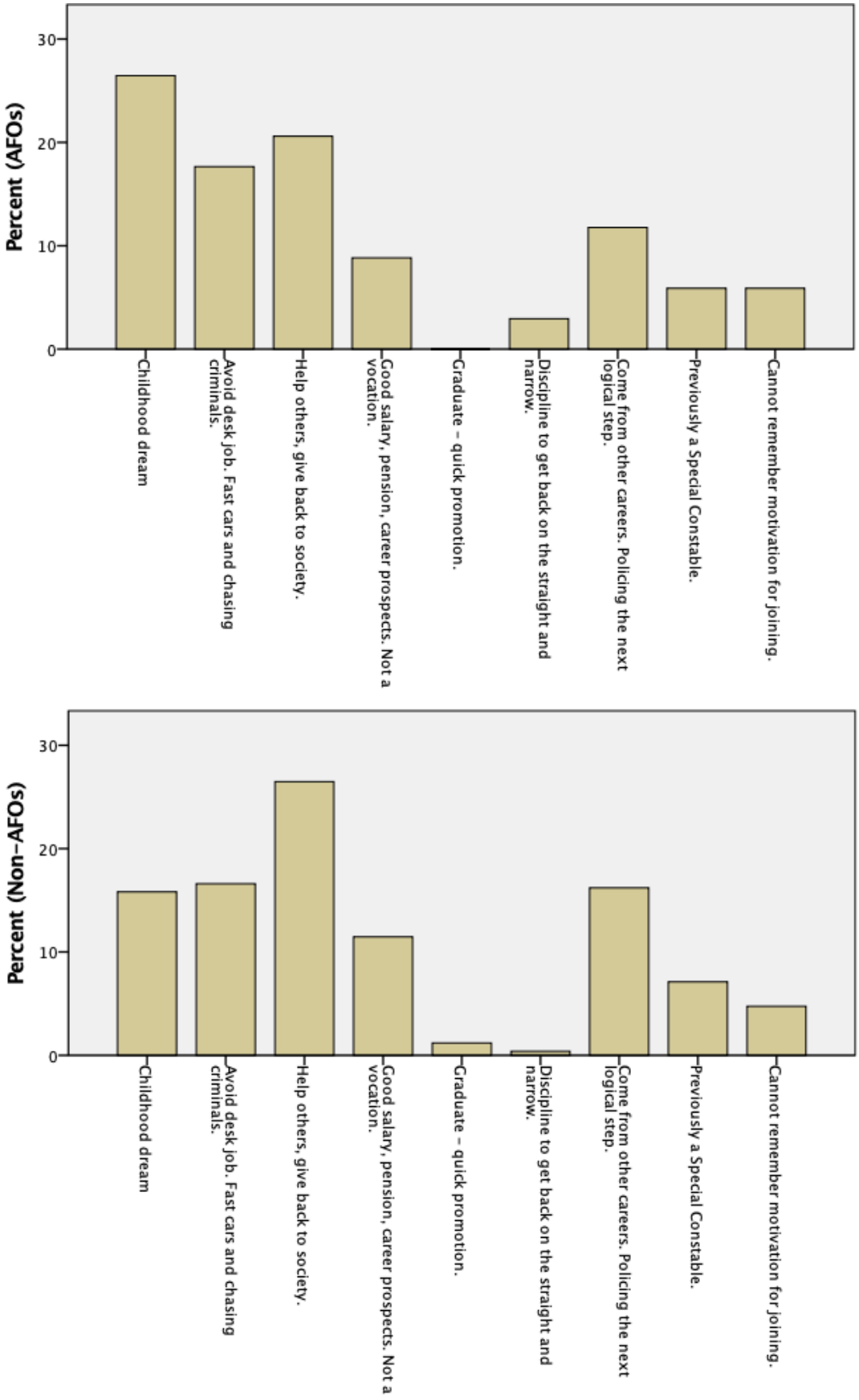


Figure 29: Frequency distributions for motivation to become a police officer, by AFO status

Although no association was found with AFO status and motivation to become a police officer, an association was found with gender, with a small-to-medium effect size (χ^2 = 14.846, p = 0.04, Cramer's V = 0.226). What is evident from the analysis of frequency distribution is the high percentage of female respondents who indicated their motivation for joining the police was based around the 'Good Samaritan' mentality, i.e. a desire to help others and give back to society, with 38% of females selecting this option, compared to 23% of males doing likewise.

The second-most popular response for males was that their motivation was to fulfil their childhood dream (20% of responses), which in contrast with females was the 5th most popular motivation (8% of responses), behind 'The Good Samaritan', 'The Drifter', 'The Excitement Chaser' and 'The Special'. This finding would suggest that the career of police officer continues to appeal much more to young boys than it does young girls, and the desire for males to become police officers tends to stem from their childhood experiences compared with females whose motivation to police is inspired by a desire to help others rather than realise their own goals. The frequency distribution for motivation for becoming a police officer, by respondent gender, is shown below at Figure 30 with the chi-square analysis shown at Appendix R.

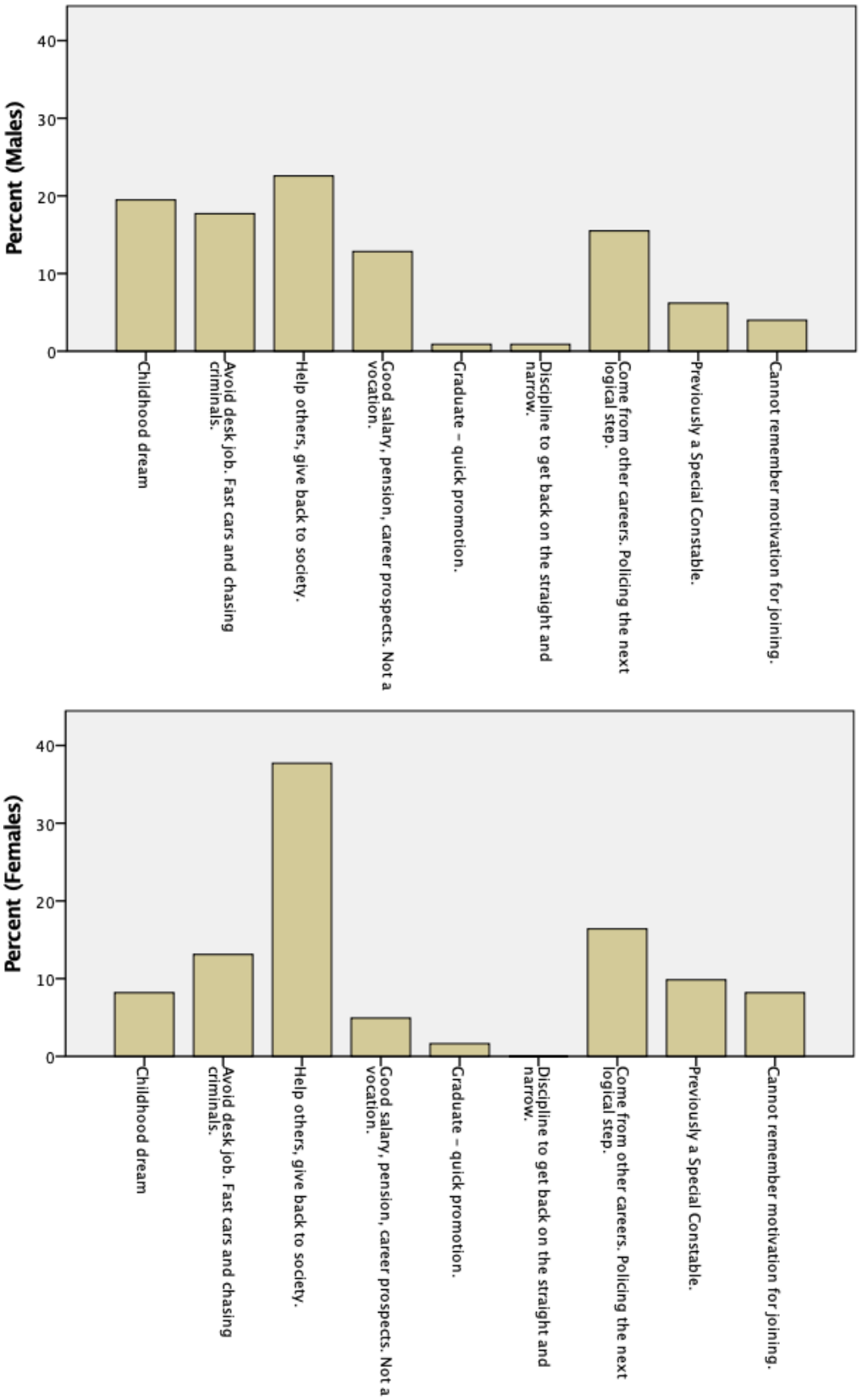


Figure 30: Frequency distributions for motivation to become a police officer, by gender.

Motivation for undertaking current role

Respondents were asked to indicate which from three options most closely described the current motivation for undertaking their current role, e.g. AFO, Detective, Response, Child Protection etc. The options offered to respondents were drawn from the work of Wrezesniewski (1997) on how people perceive their work as either a Job (focus on financial reward and necessity), a Career (focus on personal advancement), or a Calling (focus on enjoyment of fulfilling, socially useful work):

1. "My current role is a mean to an end. I do it out of necessity to earn a living. It is not intrinsic to my identity and it does not provide challenge or fulfilment." (a Job)

2. "I see my role as an opportunity to advance myself and gain status. My role offers me the opportunity gain new skills and experiences which will help me advance to a higher level." (a Career)

3. I see my role as an opportunity to be part of an organisation and a team which makes a contribution to communities and wider society." (a Calling)

Responses were analysed and no association found with either AFO status (χ^2 = 5.200, p = 0.73) or gender (χ^2 = 2.093, p = 0.369). However, whilst no association was found, of interest is the low percentage of AFO respondents who chose to describe their motivation to work as an AFO as 'a Job' (n = 1, 2.9%). By comparison this 'means to an end' option was more prevalent with Non-AFOs (n=46, 18.2%). Frequency distributions for responses to this question by AFO status are shown below at Figure 31.

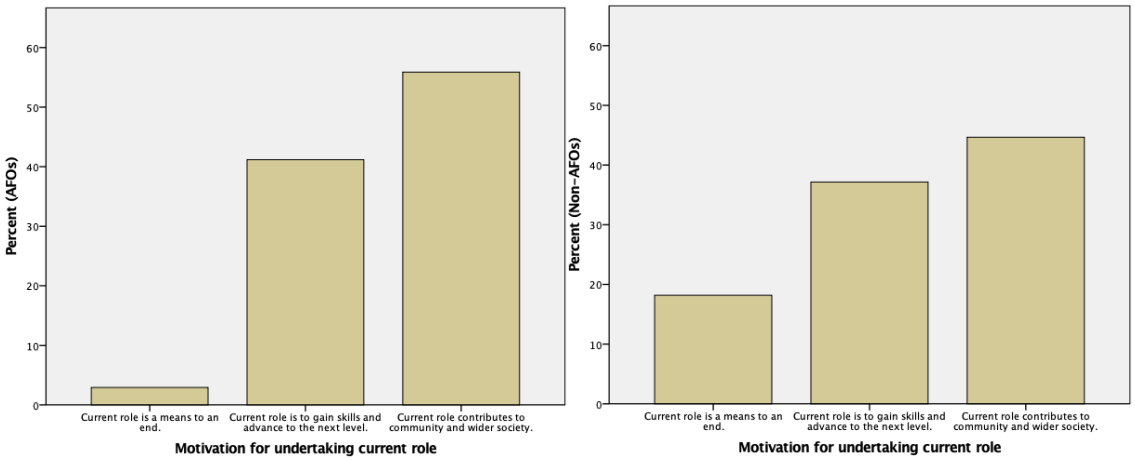


Figure 31: Frequency distributions for motivation to undertake current role (Job, Career, Calling), by AFO status.

Armed policing and prospects of promotion and career development

Respondents were asked to indicate what they considered to be the highest rank they saw themselves reaching during their policing careers. For the purpose of this theme, analysis was conducted to determine whether the AFO status of the respondent played any part in influencing where in the rank structure the individual saw themselves finishing. Although no association was found between aspirations to rank and AFO status (χ^2 = 8.252, p = 0.066) comparison of the frequency distribution (Figure 32) would suggest some tendency for AFOs to be less rank-orientated, or of the opinion they will not progress to as a high a rank, with the percentage of AFOs seeing themselves going no higher than the rank of Constable (41.2%) - almost double that of Non-AFOs (23.3%).

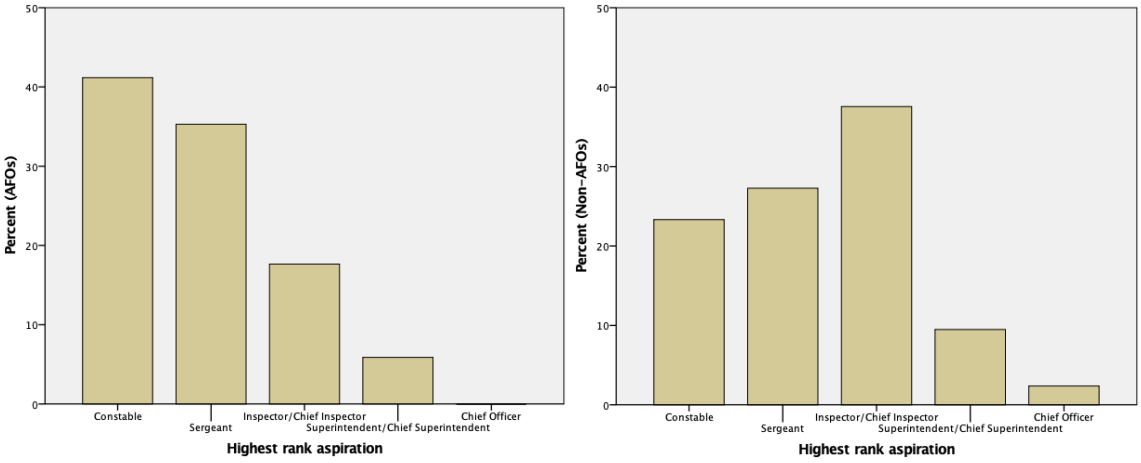


Figure 32: Frequency distributions for the highest rank respondents felt they would achieve in their career, by AFO status.

To attempt to understand what part, if any, acquiring the skill of AFO may play in an individual's prospects for promotion, respondents were asked to indicate their level of agreement with the statement "Firearms Officers struggle to achieve promotion compared to non-Firearms Officers". The intention of this question was to determine whether any perceptions may be held, internally and externally of armed policing, about how the AFO skill may influence future promotion prospects, and to consider whether this may act as an influencer on an individual's consideration of the AFO role.

No association was found between AFO status and perception of promotion prospects of AFOs compared to Non-AFOs, with an overwhelming majority of each group choosing a neutral response of neither agreeing nor disagreeing with the statement (χ^2 = 8.563, p = 0.055). While comparison of the frequency distribution (Figure 33) indicates what is roughly a normal distribution for both groups, 32.3% of AFO respondents indicated agreement with the notion that AFOs find promotion harder than Non-AFOs. By comparison, 15% of Non-AFOs agreed with the statement, suggesting that whilst there may be some perceptions within armed policing units of difficulties in achieving promotion, this sentiment is perhaps not shared by those outside of the specialism and therefore may not be acting as a barrier to recruitment.

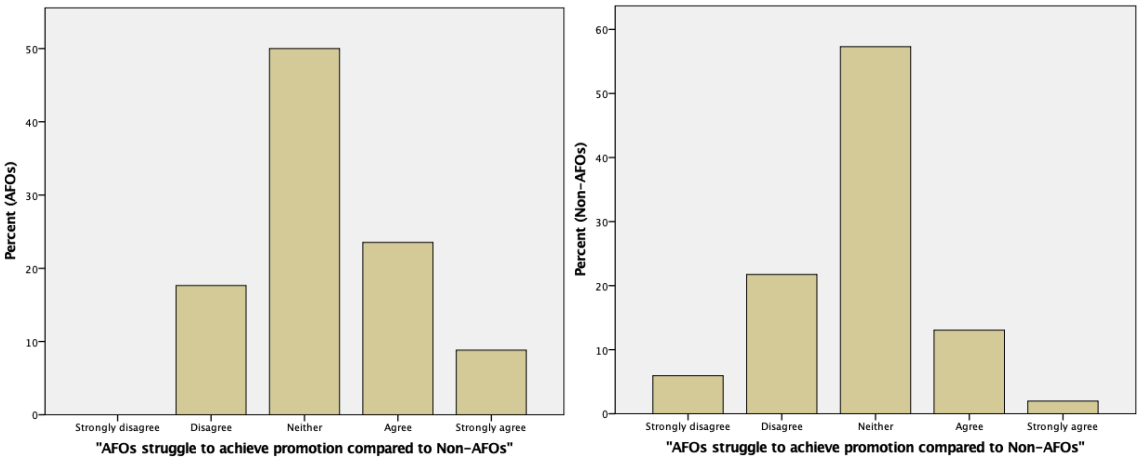


Figure 33: Frequency distributions for perception of promotion prospects of AFOs compared to Non-AFOs, by AFO status.

When comparing the armed policing specialism as a vehicle for future career prospects against the prospects of other specialist roles, no association was found between the perception of AFO and Non-AFO respondents ($\chi^2 = 6.908$, p = 0.114).

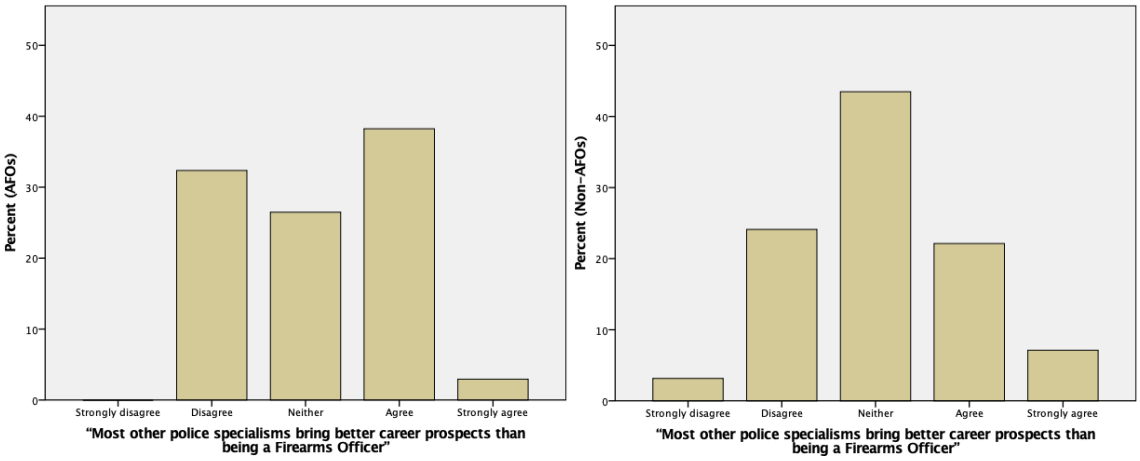


Figure 34: Frequency distribution of the responses to "Most other police specialisms bring better career prospects than being a Firearms Officer", by respondent AFO status.

As indicated in Figure 34 above, AFO responses tended to be relatively neutral on this topic, however there does appear to be a direction toward agreement insofar as AFOs may perceive their specialism as less of an enabler to career progression than some other specialist roles. By comparison, Non-AFO responses present as a near-perfect normal distribution, clustered around a neutral response of neither agreeing nor disagreeing (n = 110, 45.5%). This finding may indicate therefore, that AFOs once in role may consider their chosen specialism as a barrier to onward career opportunities, but for those outside of the specialism being an AFO is not seen as either an enabler nor a blocker to future career prospects and therefore is unlikely to be acting as either a strong barrier or motivator to recruitment.

This latter view is supported by responses provided by Non-AFOs when asked to consider their level of agreement with the statement "The future career prospects within policing for Firearms Officers were why I chose not to pursue the role", which showed 56.1% of Non-AFO respondents indicated disagreement and 37.2% remaining neutral, suggesting their perception of career progression for AFOs was not a major influence on their decision of whether to apply. The responses to this

are shown at Figure 35 and suggest that the career prospects – either positive or negative – did not act as a common influencer.

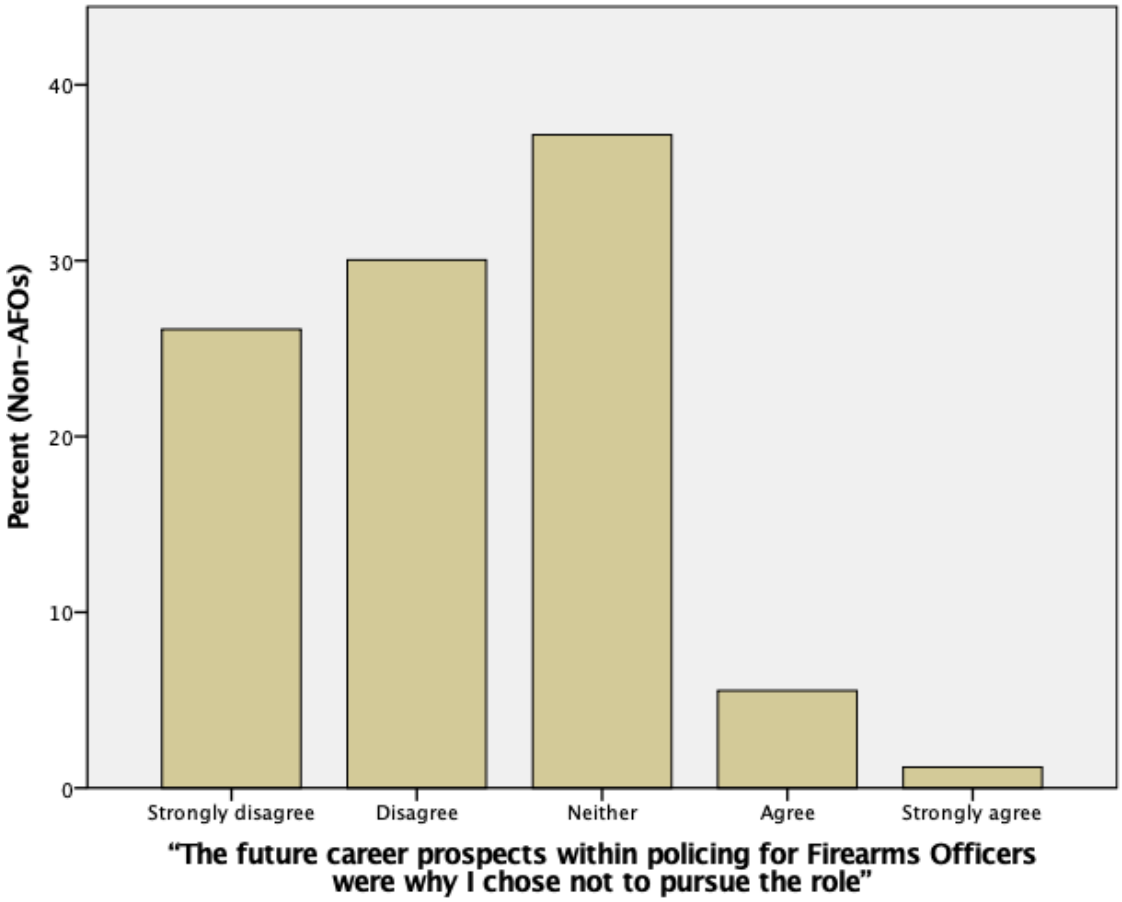


Figure 35: Frequency distribution of the responses to "The future career prospects within policing for Firearms Officers were why I chose not to pursue the role" (Non-AFO responses)

Armed policing, status and the perceptions of others

Much is made in policing of 'status', whether that be the status of high-profile arrests and the idea of 'real' police work (Young, 1991) or the status of individuals such as those within armed policing who may be regarded 'with some animosity by their uniformed colleagues, but also with respect;' (Westmarland, 2001: 139). It is with this in mind that questions were asked of respondents to explore how the AFO role was perceived, including not only the perceptions held by the individual but how the individual felt others perceived AFOs. In addition to simply asking about the Non-AFO view of AFO colleagues, questions attempted to explore how respondents felt AFOs were perceived by both rank-and-file colleagues but also by senior officers. Given the organisational risk carried by those entrusted with using lethal force on

behalf of the police and therefore on behalf of the State, it was hoped that these topics of questioning would highlight any areas of real – or perceived – disconnect between AFOs and their colleagues throughout the organisation.

Status and perceptions of the AFO

AFO respondents were asked to reflect upon their status and what part, if any, the AFO status played in their decision to pursue it as a career path. In relation to how much of an influence 'status' had on recruitment the responses to the questionnaire showed that 47.1% of AFO respondents disagreed with the statement "The status that comes with being a Firearms Officer played a part in my decision to apply", which compared with 17.6% of respondents who indicated agreement. The frequency distribution of responses is shown below at Figure 36.

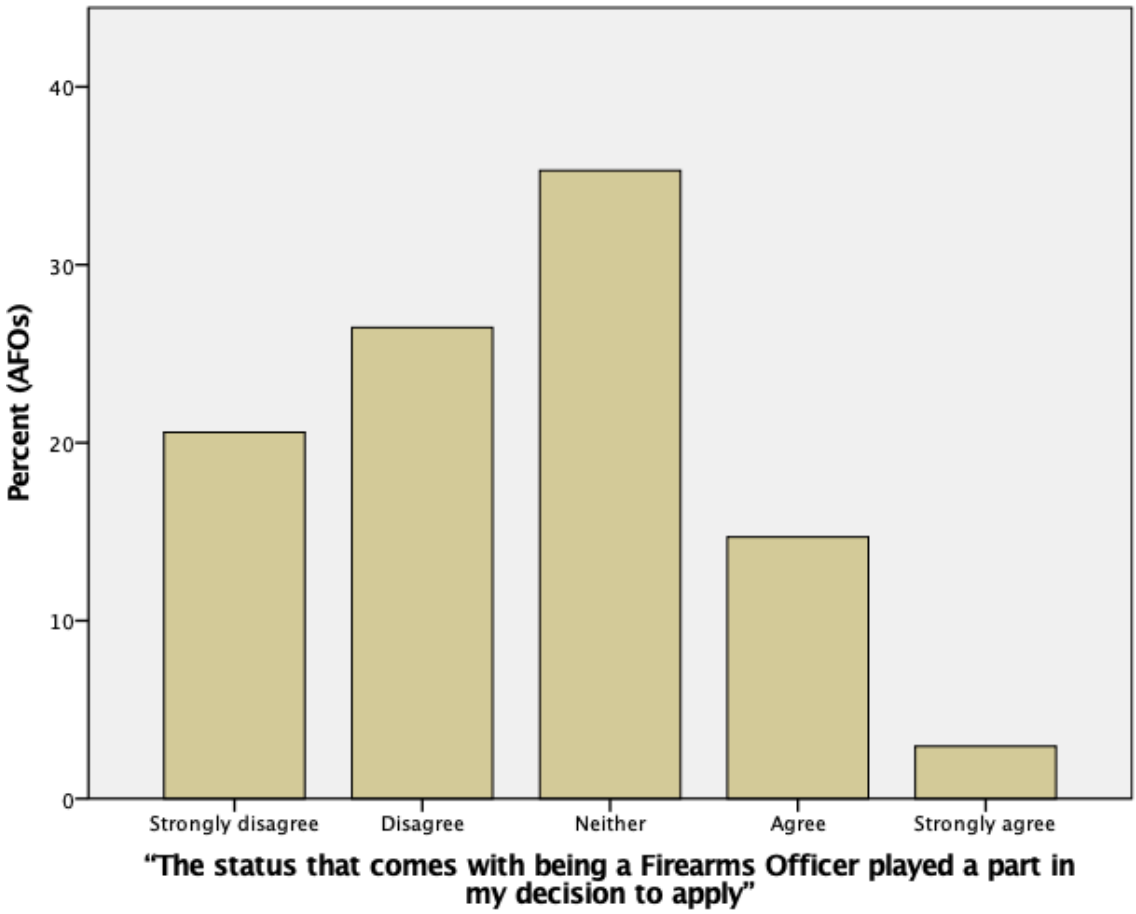


Figure 36: Frequency distribution of the responses to "The status that comes with being a Firearms Officer played a part in my decision to apply" (AFO respondents)

This data suggests that for most AFOs their perception of the AFO status within policing, whether positive or negative, did not play a part as either a barrier or motivator is determining whether or not to pursue the specialism.

Having been asked to reflect upon their recollection of AFO status prior to being successful in their chosen career choice, AFO respondents were also asked to reflect upon the status once they had achieved the AFO specialism. Asked to indicate their agreement with the statement "I enjoy the status of being a Firearms Officer" an overwhelming majority of AFO respondents (n = 24, 70.6%) agreed or strongly agreed. The frequency distribution for responses is shown below at Figure 37.

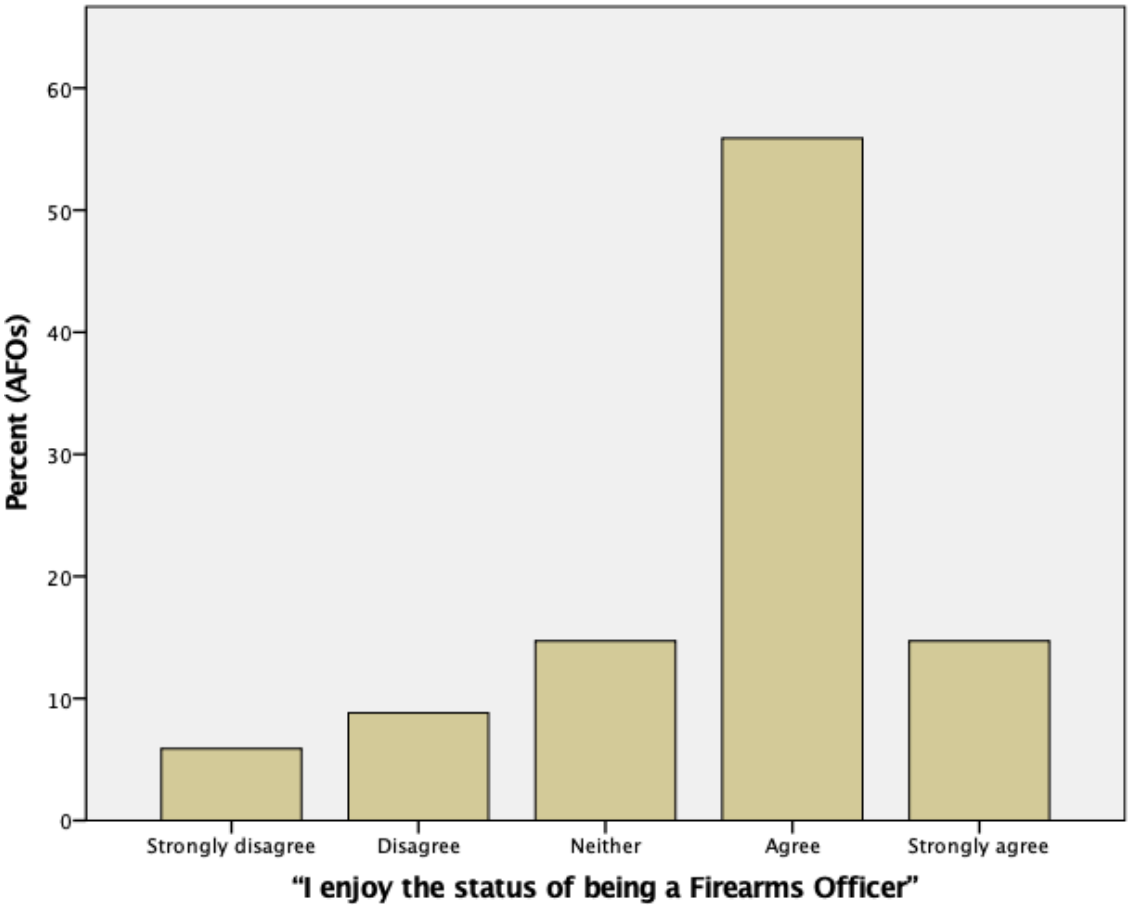


Figure 37: Frequency distribution of the responses to "I enjoy the status of being a Firearms Officer" (AFO respondents)

From the responses there is a noticeable difference between the role that 'AFO status' seems to play prior to recruitment, and the enjoyment gained through 'AFO status' once successful in achieving the position. With only 17.6% of AFOs indicating

that 'status' played a role in their decision to apply, but 70.6% of AFOs indicating they benefit from some form of enjoyment from that same status, the responses may indicate the perception of AFO status changes once an individual has transitioned from Non-AFO to AFO, and it goes from being inconsequential or trivial in nature, to one of enjoyment.

In trying to determine what may influence how an AFO is viewed by their colleagues, a question was posed in relation to how difficult the role is to achieve when compared with other policing specialisms. All respondents were asked to indicate their level of agreement with the statement "Firearms is the most difficult specialism to achieve within policing", however no association was found between AFO status and the perception of how difficult the selection and training process is ($\chi^2 = 8.665$, $p = 0.061$). However, whilst no association was found, the responses to the question (shown in Figure 38) suggest a tendency for AFOs to be more likely to feel that what they have achieved is the most difficult challenge within policing, whereas Non-AFOs, whilst appearing to recognise the challenge of firearms selection, tend to believe it less of a test than some of the other specialisms available.

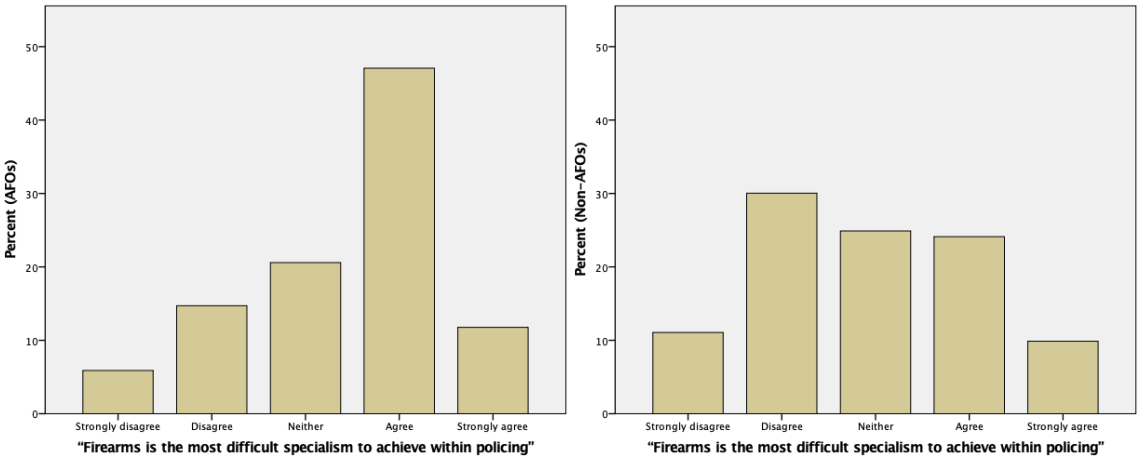


Figure 36: Frequency distribution of the responses to "Firearms is the most difficult specialism to achieve within policing", by respondent AFO status.

In further exploring the concept of how the AFO is viewed, participants were asked to indicate how they felt AFOs were thought of by both rank-and-file and senior officers (i.e. Superintendent and above). Two questions were asked, with participants asked to indicate their level of agreement with two statements;

"Firearms Officers are well-thought of by rank-and-file colleagues" and "Firearms Officers are well-thought of by senior officers". The frequency distributions of responses are shown at Figure 39 and Figure 40 respectively.

When considering the perceptions of AFOs held by what was termed 'the rank-and-file', the response from AFOs was that their reputation with their colleagues was poor, with 44.1% of AFOs disagreeing that they were well-thought of. By contrast, Non-AFOs who also agreed that AFOs were not well-thought of amounted to 37.9%. Given the percentage of AFO respondents who indicated they enjoyed the status that firearms gave them, this raises questions that despite over 70% of AFOs saying they enjoyed their status, that almost half of the same group indicated they felt they were poorly thought of by their colleagues.

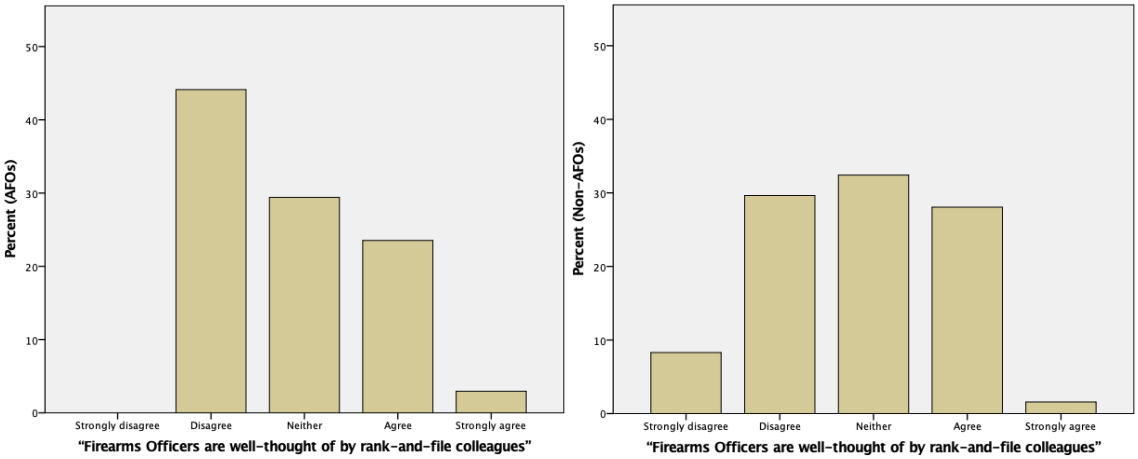


Figure 39: Frequency distribution of the responses to "Firearms Officers are well-thought of by rank-and-file colleagues", by respondent AFO status.

When considering the perception of AFOs held by senior officers, an association was found between AFO status and agreement with the aforementioned statement (χ^2 = 14.316, p = 0.004, Cramer's V = 0.215). There is suggestion of a strong sense of feeling amongst AFOs that senior officers hold a positive view of them, which appears in contrast to the perception held by the rank-and-file. From the responses obtained, 55.9% of AFOs felt they were well-thought of by senior officers, yet only 26.4% of AFOs felt similarly about their operational colleagues.

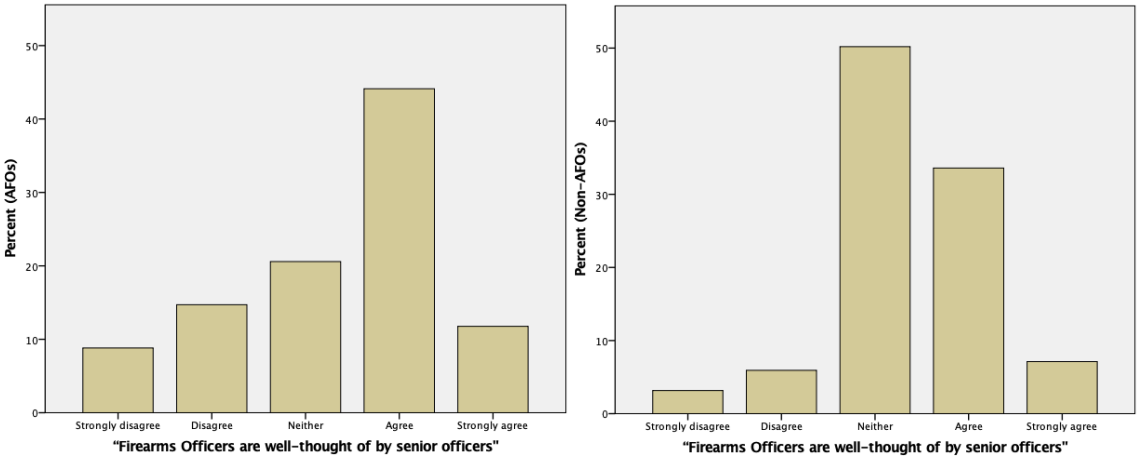


Figure 40: Frequency distribution of the responses to "Firearms Officers are well-thought of by senior officers (Supt. and above)", by respondent AFO status.

Individual compatibility

The final theme considered in the context of barriers and motivations to becoming an AFO involved exploring some aspects of individual culture and socialisation, away from policing, which may have proven incompatible with the notion of armed policing and the possibility of having to take a human life on behalf of the State.

Concerned less with finding associations with gender and AFO status, as has been the case through the majority of the other analysis, this area of research was intended to try and identify to what extent cultural backgrounds influenced career decisions and to what extent they played a part in the decision to become an AFO. This theme was entitled 'individual compatibility' as it sought to explore how the AFO role fitted with an individual's personal circumstances, religion and upbringing, and importantly how the role may be perceived by those within the individual's social circle who are likely otherwise unconnected to policing.

The role of religion and culture as a career influencer

All participants were asked to provide their level of agreement with the statement "My religion or cultural background plays a part in my career development decisions" and the responses indicated that for the vast majority of individuals their religious or cultural background played little or no part in the decisions they made in relation to their career. When analysing the frequency of responses, it can be seen that 7.3% of respondents (n=21) indicated some level agreement with the

statement, suggesting their religion or culture plays a part in influencing their career decisions.

Agreement	Frequency	Percent	Cumulative Percent
Strongly disagree	51	17.8	17.8
Disagree	35	12.2	30.0
Neither	69	24.0	54.0
Agree	10	3.5	57.5
Strongly Agree	11	3.8	61.3
I do not consider this relevant to me	111	38.7	100.0
Total	**287**	**100.0**	

Table 8: Frequency of responses to "My religion or cultural background plays a part in my career development decisions".

The 21 respondents who indicated their cultural or religious background does influence their career development choices were then analysed through the responses provided in the profiling questions. This analysis revealed the breakdown of the 21 responses by ethnicity and religion as shown at Table 9 and Table 10, below, with the full frequency distribution for 'Ethnicity' and 'Religion' across the sample shown at Appendix S.

Ethnicity	Frequency	*Total in sample*	*% of sample group*
White British	17	254	6.7%
Any other white background	1	6	16.7%
Asian Pakistani	1	1	100%
Any other Asian background	1	1	100%
Black African	1	2	50%
Total	**21**		

Table 9: Ethnicity of 21 respondents who indicated religious or cultural background influenced career development decisions

Religion	Frequency	*Total in sample*	*% of sample group*
No religion	6	159	3.8%
Christian	10	112	8.9%
Muslim	2	3	66.7%
Other	1	4	25%
Prefer not to say	2	7	28.6%
Total	**21**		

Table 10: Religion of 21 respondents who indicated religious or cultural background influenced career development decisions

The AFO role and religious/cultural compatibility

Having understood the extent to which an individual's culture or religion influences career development decision across the sample, questions were asked to explore how specifically the role of AFO was compatible with those individual values.

Participants were asked whether they felt the role was compatible with their religious or cultural views with 25 respondents (8.7%) indicating incompatibility

between their views and the AFO role. The breakdown of the ethnicity and religion of these respondents is shown at Table 11 and Table 12.

Ethnicity	**Frequency**	***Total in sample***	***% of sample group***
White British	23	254	9.1%
White Irish	1	6	16.7%
Asian Indian	1	1	100%
Total	**25**		

Table 11: Ethnicity of 25 respondents who indicated the AFO role is incompatible with their religious or cultural views.

Religion	**Frequency**	***Total in sample***	***% of sample group***
No religion	14	159	8.8%
Christian	8	112	7.1%
Muslim	1	3	66.7%
Sikh	1	1	100%
Prefer not to say	1	7	14.3%
Total	**25**		

Table 12: Religion of 25 respondents who indicated the AFO role is incompatible with their religious or cultural views.

A question was also asked which specifically explored the compatibility of the AFO role with obligations placed upon individuals by their culture or religion, for example a requirement for individuals to pray at prescribed times and in specific ways, or a requirement for clothes or hair to be worn a certain way. Undertaking the role of a police officer comes with its own obligations; uniforms, shift work, an inability to break away from incidents to suit personal needs for example. However, given respondents were already in a policing role it was assumed that whatever an individual's personal needs they were being managed accordingly by virtue of the

fact they were working as a police officer. Respondents were asked to indicate their level of agreement with the statement "The role of a Firearms Officer would allow me to fulfil my religious/cultural obligations" with the intention that this would indicate whether the specialism was being discounted by officers who may have felt the requirements of this role in particular would not afford them the opportunity to practice their culture or faith in an appropriate way.

All respondents answered this question, with 33 (10.5%) indicating disagreement, i.e. the AFO role would not allow them to fulfil their religious or cultural obligations. Of these 33 responses all were from a white background (32 – White British, 1 – White Irish), and all indicated either 'No religion' (n = 21) or 'Christian' (n = 12) as their religion. This finding suggests that those cultures and religions whose practices could be considered more time-consuming in terms of frequency and duration do not feel the AFO role specifically prevents them from actively practising in a way they consider suitable, and for those 33 respondents it is something else which conflicts with the specialism.

A further question was asked of respondents in relation to the perceptions of AFOs held by the individual's peers within their religious or cultural circle. Asked to indicate their level of agreement with the statement "Those outside of policing who share my culture or religion would perceive the role of a Firearms Officer positively", the overwhelming majority indicated agreement or neutrality, with 22 respondents (7.6%) responding otherwise. The ethnicity and religion of those 22 responses is shown below in Table 13 and Table 14.

Ethnicity	**Frequency**	***Total in sample***	***% of sample group***
White British	20	254	7.9%
White Irish	1	6	16.7%
Black African	1	2	50%
Total	**22**		

Table 13: Ethnicity of 22 respondents who indicated those who share their cultural or religious background would not perceive the AFO role positively.

Religion	**Frequency**	***Total in sample***	***% of sample group***
No religion	15	159	9.4%
Christian	5	112	4.5%
Muslim	1	3	33.3%
Other	1	1	100%
Total	**22**		

Table 14: Religion of 22 respondents who indicated those who share their cultural or religious background would not perceive the AFO role positively

Finally, respondents were asked about the one aspect of armed policing which is arguably the preserve of AFOs; the responsibility for taking the life of another on behalf of the State. Respondents were asked to indicate their level of agreement with the statement "The possibility I may have to take human life is compatible with my religious or cultural views", and whilst the majority again indicated agreement or a neutral response, 38 respondents (13.7%) indicated this duty would not be compatible with their views. The ethnicity and religion of those 38 responses is shown below in Table 15 and Table 16.

Ethnicity	**Frequency**	***Total in sample***	***% of sample group***
White British	31	254	12.2%
White Irish	2	6	33.3%
Any other white background	1	6	16.7%
Asian Indian	1	1	100%
Any other Asian background	1	1	100%
Black African	1	2	50%
Prefer not to say	1	7	14.3%
Total	**38**		

Table 15: Ethnicity of 38 respondents who indicated the possibility of having to take a human life would be incompatible with their religious or cultural views.

Religion	**Frequency**	***Total in sample***	***% of sample group***
No religion	22	159	13.8%
Christian	13	112	11.6%
Muslim	2	3	66.7%
Sikh	1	1	100%
Total	**38**		

Table 16: Religion of 38 respondents who indicated the possibility of having to take a human life would be incompatible with their religious or cultural views.

This chapter has sought to detail the findings and where found highlight associations and differences in responses. What follows is a discussion of these findings in the context of existing literature and real-world application.

Chapter Five: Discussion

This chapter will discuss findings in the context of existing literature and the core themes explored as part of this research. In considering the findings it is important to remember the influence that various concepts, such as machismo and the pressure to present socially desirable answers may have had on an individual's response.

The first part of this chapter examines the demographic of AFOs as presented by this research before turning to consider findings and subsequent discussions by addressing the three underpinning questions of this research, namely:

1) What perceptions of firearms officers exist within policing?
2) What encourages a police officer to become a firearms officer?
3) What discourages a police officer from becoming a firearms officer?

Each question will be addressed in the context of themes from existing literature and seek to draw inferences and conclusions relevant to the specialism of armed policing. The second part of this chapter discusses the implications of the research, outline the limitations of the study and present recommendations for police forces.

The demographic of armed policing units

This research found that AFOs tend to be both older and have more policing service than Non-AFOs, with AFOs being, on average, three years older and with four years' more service. This may indicate that the armed policing specialism attracts an individual but is also one which retains them, with turnover of staff being slower than elsewhere within policing. This slower turnover of older, more experienced officers, may be contributing toward problems in addressing organisational and cultural change.

Whilst women now make up approximately 30 per cent of the police workforce across England and Wales, the specialism of armed policing continues to see a lack

of representation. The research site has only seven women AFOs out of an establishment of 126, representing only 5.5% of the total. When comparing this to the findings of Brown and Sargent almost 25 years ago in 1995, it represents an increase of only 3% which suggests change has not been as progressive as the Police Service may have hoped. Whilst gender is specifically addressed later in this chapter the research continues to support both anecdotal and empirical evidence of the fact that women remain underrepresented as a group within armed policing. Why that may be, is discussed later.

The information provided by the research sample leads to a conclusion that armed policing continues to be male-dominated, from a predominantly white background, with officers older and with more years of policing service than their Non-AFO counterparts. AFOs also tend to be underrepresented amongst senior officer ranks when compared to Non-AFOs.

Views on armed policing

The routine arming of the police in England and Wales is an area of controversy. This research showed only 21.6% of all officers surveyed indicated a desire to be armed at all times. Whilst this represents a significant reduction in the PFEW findings from two years ago, it is worthy of note that the PFEW research took place only a few months after high profile terrorist attacks on Westminster Bridge, Manchester Arena, London Bridge and Finsbury Park mosque. It is likely that these events may have influenced the PFEW survey responses.

This research revealed no difference between the views of AFOs and Non-AFOs on armed policing, which suggests that exposure to firearms does not sway an individual's view on the necessity for routine arming. Male respondents however did show a preference for increased arming of the police when compared to females, suggesting there is something innately gender-orientated that influences the view on routine arming. This is also reflected in the attitudes held by officers when applying to join the police, particularly in relation to their intentions toward a career

in armed policing, where it was found that males are far more likely to join with the intention of becoming an AFO.

It could be argued therefore, that as the workforce across policing continues to become more representative, the appetite for routine arming within policing will reduce, as will the overall intention to become at AFO at the point of commencing service.

Perceptions of firearms officers within policing

The police use of firearms remains a highly contested issue in a democratic society as it requires representatives of the State being trained and equipped to deprive fellow citizens of their life. In a country where policing requires an element of public consent, and where an appetite for routine arming still does not exist, it begs questions of the perceptions held of those individuals within policing who choose to take on the role of AFO. Punch concludes, "the ultimate in police decision-making is killing a fellow human being" (2011: 199), and it goes without saying that inferences will be drawn about a non-compulsory role with such responsibility and those who volunteer to fulfil that obligation.

Focusing principally on perceptions held by officers about other officers, this research sought to explore a number of factors that may influence opinions about the role of AFOs and of those individuals who undertake it.

Machismo

Research has shown us that traits of masculinity continue to weave through aspects of the police identity, with Loftus (2009: 96) describing the culture as "devaluing 'softer' approaches to policing, [whilst a] powerful undercurrent of masculinity encourage an aura of toughness and celebration of violence." It could be argued that few roles within policing epitomise this established position than that of the AFO.

Use of the Bem Sex-Role Inventory (BSRI) attempted to establish the value placed by officers on various behavioural traits, with each trait being categorised as either 'masculine', 'feminine' or 'neutral', This research aimed to explore whether participants favoured their own gendered traits, and whether the AFO role was perceived as being 'hyper-masculine', with an obvious preference for masculine behaviours. Little difference was found in the views of men and women on the desirability of behaviours, with both groups largely in agreement about how desirable each behaviour was in the generic police officer and AFO roles. Men and women were in closer agreement on the desirability of behaviours in an AFO than in the role of a police officer, where gender association found differences in only three out of 24 instances.

When comparing the difference in desirability between the police officer and AFO role, little difference was found. When considering the role of AFO, where one might have expected to see an increase in desirability of masculine traits, this was not seen in the data. The research therefore supports the view that there is no perception amongst officers – either AFOs or Non-AFOs – that masculine behaviours are any more desirable in an AFO than in any other police officer, or that feminine behaviours are any less desirable in the AFO role.

Despite men and women largely agreeing on the desirability of personality traits in AFOs, there was an association between gender and opinion of the 'macho' nature of the AFO, with women more likely than men to perceive the role in this way. With over 62% of female participants indicating agreement with the macho status, it is clear that despite masculine behaviours being no more valued than feminine ones the role continues to be perceived as inherently masculine.

Danger, Action and Excitement

The AFO role is likely to present a greater level of danger to the individual given their use is usually only mandated when the threat is such that Non-AFOs aren't equipped and trained to deal. In trying to deduce the perceptions held about AFOs in regard to danger and excitement, participants were asked to indicate how dangerous and exciting they felt the AFO role was, and for Non-AFOs to also indicate

the same for their current role. The assumption therefore was that if the AFO role was perceived as more dangerous or more exciting, then the perception of the individuals undertaking the role may be one of thrill-seekers with what may be a heightened 'sense of mission' with regard to policing. Marks (2005) argues that those officers predisposed to thrill-seeking are more likely to undertake forms of dangerous police work. It is this established approach which underpins the notion that if armed policing is perceived as comparatively more exciting and/or dangerous compared to other specialisms then those undertaking the role are perceived as more heavily attuned to thrill-seeking than their colleagues.

When considering danger from a gender perspective, the views of the danger posed by the AFO role were similar across both men and women. Where Heidensohn argues that the 'nature' of women's physical and psychological characteristics and the 'nature' of policing involving danger are seen as incompatible (1996: 174), this research suggests that the perception of danger across genders is relatively similar. Combined with the similarity of views of masculine and feminine behaviour traits, this research begins to present a view of policing in which both male and female officers value the same characteristics in their colleagues, with no overwhelming preference for either masculine or feminine behaviours.

This research found that there was very little difference in perceptions about the level or frequency of exposure to danger or excitement, suggesting that AFOs are not perceived as thrill-seekers by colleagues. The assumption that AFOs have a heightened desire to expose themselves to danger is therefore not seen in the research findings. The similarities in perception of danger contradicts the view of Fielding (1988) and Manning (1978) that the subcultures and associated differences of perceptions of the police mission, particularly in relation to the issue of the danger the public represent, are perhaps more universal than first thought. If, as Cockcroft describes, the symbolic role of danger in the police officer's work continues to shape attitudes, behaviours and assumptions (2013: 111) then this research suggests that attitudes and behaviours are being shaped consistently across both the gender and AFO-status divides.

Armed policing culture

This research explored the perceptions of the culture and the feeling of acceptance, receptiveness and accessibility of the firearms units. Non-AFOs in this study felt that firearms units were inaccessible to them and their colleagues, suggesting that the units are perceived as being closed off from the wider police. Perceptions of inaccessibility amongst Non-AFOs were similar across men and women, indicating that the armed policing specialism is equally distant to both groups.

Armed policing is also presenting an impression toward women that they would be less welcome in firearms. As Figure 23 shows, males are more likely to agree that they would be welcome amongst AFOs, yet women feel equally as strong in their disagreement. The contrast of feeling differs from the similarity of views on the desirability of behaviours, and it seems perverse that whilst men and women largely agree on what makes a 'good' AFO, with no significant difference in masculine and feminine behaviours, the fact that one gender group feels welcome and the other does not raises questions about why this might be. The perception amongst women that they would less welcome within an armed policing unit was repeated elsewhere in the research, with almost 25% of females participating disagreeing with the notion that women would 'fit in'.

The sense of feeling welcome was also found to differ based on an individual's disability status. Whilst accepting that the enhanced fitness and medical requirements necessary to achieve and maintain AFO status make selection more challenging for many with disabilities, there are many disabilities which arguably exist but are invisible, and this invisibility makes inclusivity difficult. This research used the definition taken from the Equality Act 2010 as 'an individual is disabled if they have a physical or mental impairment that has a 'substantial' and 'long-term' negative effect on their ability to do normal daily activities', and it found that individuals who considered themselves as having a disability would be likely to consider themselves unwelcome.

With only 15% of disabled respondents stating someone like them would be welcome within armed policing, there appears a perception of exclusion. With 52%

of respondents believing that no adjustments can be made to accommodate those with disabilities and research suggesting disability is often associated with femininity (Thomson, 1997) or as a way of presenting disabled men as feminised and lacking in masculine traits (Meekosha, 2004), the perception of armed policing as an inaccessible and unwelcoming world appears to exist in the minds of those with health challenges.

Perceptions of AFOs by colleagues

Participants were asked to indicate how they felt AFOs were perceived by both frontline and senior officers (Superintendents and above). AFOs indicated opposing views for each category, presenting the feeling that AFOs felt well-regarded by senior officers, but not by rank-and-file. The potential acrimony at the operational level between AFOs and Non-AFOs supports Westmarland's (2001) research which cited issues of animosity and proprietoritality and this conflict between the two groups may be contributing toward an exclusionary feeling reinforced by the inaccessibility of armed policing units to outsiders.

Motivations to become a firearms officer

The concept of 'orientation to work' has been discussed as key motivation. With career commitment being influenced by the level of specialism afforded to an individual (Von Glinow, 1988), this research focused on the motivations for joining armed policing, despite the perceived risks of the role.

Danger and excitement of the role

With AFO respondents being less likely to consider themselves 'thrill-seekers' than Non-AFOs, it appears that motivation towards a firearms role may not be affected by desire to chase exciting or dangerous experiences. When asked, 18% of AFOs reported the danger of the role appealed to them compared with 65% feeling that the excitement of the role was most appealing. Excitement therefore appears related to other aspects of the role rather than the perceived dangerousness. This excitement may reflect a desire to limit the more 'mundane' aspects of police work, what van Maanen (1978) and Holdaway (1983) describe as 'bullshit' or 'rubbish'

work. The AFO role appears reserved for the specialist, more 'exciting' parts of policing.

Status as an AFO

The research was interested in how the AFO is perceived by firearms colleagues and the wider organisation. Studies of police culture capture the status assigned to the police as 'thin blue line' between order and chaos (Reiner, 2010; Westmarland, 2001). Westmarland (2001) notes the conflicting perceptions how the AFO as animosity and respect due to the specialist skills and hyper-macho behaviours.

AFOs in the study felt the role is the most difficult specialism in the police, with 59% indicating as such; by contrast only 34% of Non-AFOs felt the same way. This indicates a status and prestige assigned to the role by AFOs. 71% of AFOs indicated that they enjoy the status that comes with the role, however by contrast only 18% felt that the status of the role influenced the decision to join firearms.

The AFO's status appears a feature of the role which is overwhelmingly enjoyed, but which is not a factor in the decision to apply, so whilst status may not act as an initial motivation to undertaking an AFO role, once successful, the enjoyment that comes from the position held is evident. This may in turn act as a factor in keeping AFOs in post, which may explain anecdotal reports of low turnover rates in firearms units and higher average age and length of service.

Culture

Studies of police culture have revealed the masculine values and beliefs. This research has shown that the culture in armed policing units acts as a motivator to apply for the role, with over half (53%) of respondents stating they found the behaviours and attitudes evident within armed policing appealing. Police forces must therefore ensure that the existing culture in firearms units reflects the attitudes and values which will recruit the right individuals.

The importance of an individual feeling that they 'fit' with their work environment is linked with job satisfaction (Holland, 1996). However, perceptions of culture can

act as a deterrent and if there are aspirations to change aspects of culture within armed policing then the continued recruitment of individuals who find the current regime appealing may lead to difficulties in bringing about future change. It follows, therefore, that if policing aspires to change the demographic of armed policing, such as increasing the number of women officers, then forces must be cognisant of the effect that culture plays in appealing to would-be AFOs.

Career prospects

Policing traditionally has been a lengthy career, leading the College of Policing and National Police Chiefs' Council to call for an increased 'churn' of staff (NPCC, 2016). Police officers are required to plan their career path, as experience of one policing area is often required before moving onto area specialism or rank. This research explored the career ambitions of AFOs and how the AFO experience may benefit future career opportunities. AFOs in the study are less likely to aspire toward promotion, with over 41% of AFOs not seeing themselves going any higher than constable rank. By comparison, a little over 20% of Non-AFOs saw themselves remaining at constable rank, with inspector/chief inspector identified as the most common rank to aspire to (over 40% of Non-AFOs). By contrast fewer than 18% of AFOs gave the same view, and not a single AFO saw themselves reaching Chief Officer rank. AFOs not aspiring toward higher rank may be influenced by the requirement to surrender their AFO status. Many non-metropolitan forces do not have AFOs at inspector rank or above, and so the decision to pursue promotion can often come with a loss of AFO status. There were no indications however that future career prospects acted as a driver toward becoming an AFO. Whilst some AFOs felt their specialism offered benefits for employment opportunities outside of policing, very few indicated that this was the reason for pursuing their chosen path (n = 1, 3%).

The research describes armed policing as an opportunity for individuals to pursue an area of policing which excites and interests them, which affords protection from 'rubbish' forms of police work. If, as suggested by van Maanen and Holdaway, individuals within policing aspire toward forms of 'good work', represented by instances such as the apprehension of a worthy criminal or the exercise of masculine

traits such as physical prowess and the willingness to confront danger, then armed policing is an area which will always attract individuals keen to seek out such pursuits.

AFOs appear to consider status and the opportunities for excitement as key factors in influencing their decision to apply and once in the role do not appear keen to move on. If high staff turnover and low organisational commitment are indicators of low job satisfaction (Gerhart, 1990; Jayaratne, 1993; Mobley, 1977) then the low churn in armed policing may reveal high job satisfaction. However, as will be discussed in the next section, culture within armed policing acts as a barrier for some would-be AFOs, and whilst the retention of AFOs brings many benefits, there are challenges in assumptions of barriers, inaccessibility and cultural change.

Barriers to becoming a firearms officer

This research examined the barriers that discourage individuals to pursue a career in armed policing.

Danger and excitement

Non-AFOs indicated that they felt the AFO role is dangerous, with the majority (n = 158, 63%) indicating a score ≥ 4 (1 = Very little danger, 5 = Very much danger). By contrast, Non-AFOs gave a view that the role of an AFO was less exciting than it was dangerous, with 44% (n = 111) giving the same score of ≥ 4 when asked to indicate how exciting the role is. Given the perception of danger in the AFO role it seemed reasonable therefore that this may act as a barrier to some individuals, however an overwhelming majority of Non-AFO respondents (n = 225, 89%) indicated that danger played no part in their decision not to consider the role.

Participants were asked to consider how the increased danger may impact upon their family, and whether that may play a part in the decision not to work in an armed capacity. Where only 11% of Non-AFO participants stated that the danger they could face played a part in their decision not to pursue the specialism, this increased to 21% when asked to consider how that danger may translate to those people around them. This suggests therefore that Non-AFOs perceived an increased

danger when moving into the AFO role but that this does not put off individuals when considering the threat to themselves.

Culture and acceptance

As discussed previously, for many AFOs they found the culture offered by armed policing appealing, and it is likely this featured in their decision to apply. However, culture can also act as a barrier for those who may feel their values and attitudes are not reflected in firearms units. Perceptions of AFOs as hyper-macho may not appeal to new police recruits.

This research has shown that perceptions of armed policing culture do not act as a barrier for many in considering future specialisms with as many Non-AFOs indicating they found the culture appealing as those who found it unappealing. Whilst no overwhelming preference was found, 40% of Non-AFOs identifying the culture as unappealing is a cause for concern for forces. Of concern is whilst only 36% (n = 22) of women joined policing knowing that AFO was not something they wanted to do, with only 22% (n = 13) of female Non-AFOs indicating that they felt someone like them would be welcome, 49% (n = 30) finding the units inaccessible and 47% (n = 28) stating that the culture within armed policing put them off applying, this further supports Brown and Sargent (1995) in that a lack of motivation on the part of women contributes to under-representation, but the effect of culture and organisational attitudes which impede recruitment of women.

Similarly, despite almost 80% of disabled respondents indicating the role of AFO may appeal to them, 63% (n = 17) indicated feeling unwelcome on an armed policing unit and 56% (n = 15) agreed that the perception of armed policing culture acted as a barrier to applying.

Non-AFOs found armed policing units to be more inaccessible when compared to AFOs, with only 11% of Non-AFOs (n = 28) indicating a view that they felt armed policing was accessible to non-firearms officers. This finding indicates 'them and us' cultures which may contribute toward issues of isolation, reinforced solidarity and problems in bringing about cultural change. The findings paint a picture of

inaccessibility in armed policing which is inaccessible and isolated from those who do not fit the stereotypical AFO.

Career prospects

Non-AFOs were found to be more likely to aspire to a higher rank than their AFO counterparts, however Non-AFOs have also shown a perception that undertaking the role of AFO may impede future promotion prospects. Only 14% (n = 36) of Non-AFOs felt that the role of AFO increased promotion prospects, with almost half (48%) indicating to the contrary. This finding suggests that for those outside of armed policing the move into an AFO role may not support career ambitions towards higher rank later in their career. However, despite Non-AFOs believing that the role impedes promotion, very few indicated that this played a part in their decision not to pursue the specialism. Only 7% (n = 17) reported the future career prospects of an AFO acted to dissuade them from applying, suggesting that whilst many feel promotions are more difficult for AFOs, it does not feature as a significant barrier to recruitment.

Religious and cultural compatibility

Participants indicated whether their religion or individual culture plays a part in their career decisions within policing. Only 7% (n = 21) reported their religious or cultural background influenced their career choices. However, of these 21, 17 consider themselves 'White British' and 16 considered themselves as either 'Christian' or 'No religion'. The AFO role was listed as being incompatible with an individual's religious or cultural view on 25 occasions, 23 of which were 'White British' and 22 of which were 'Christian' or 'No Religion'. Similar findings existed when exploring whether the AFO role would allow individuals to undertake their religious practices and how AFOs by ethnic and religious communities.

This research has indicated therefore that the under-representation of ethnic and religious minorities is not due to an incompatibility between the AFO role and the various religious and cultural practices and beliefs, nor is it due to a negative perception amongst differing communities of the role of armed officers. An officer's religion or culture appears to not act as barrier to recruitment, indeed this research

has shown that very few officers choose or are required to factor such elements into their career decisions.

Conclusion

The findings show that the armed policing culture continues to act as a barrier for recruitment to the AFO role. The danger and excitement of the role do not act as a significant barrier, nor do the potential future career prospects or compatibility with an individual's home life with regard to their own religious and cultural beliefs and practices.

However, despite armed policing continuing to be an area of policing that appeals to many recruits upon joining, regardless of their personal characteristics, it is the culture of armed policing which is the most notable barrier to applying. Armed policing is seen as inaccessible to outsiders, and this becomes more acute when exploring the perceptions of groups who would appear not to fit the stereotypical AFO.

Over two decades ago it was indicated that the motivation and interest in armed policing appears largely uniform across recruits but that cultural attitudes and organisational processes serve to discourage some more than others. Despite findings showing no difference in the views of men and women on the desirable traits of an AFOs, and masculine traits being shown to be largely as desirable as feminine ones, women feeling armed policing units are unwelcoming suggests that there remains work to be done in improving the perception of armed policing units.

Chapter Six: Conclusion

This chapter summarises the findings in relation to the research questions and the existing literature. The chapter outlines the implications for policing and then concludes with a discussion of the limitations of the study and potential future research.

Research Context

Studies of police occupational culture have long captured characteristics of the sense of mission, isolation, suspicion, machismo and racial prejudice as pervasive features. The underrepresentation of women within policing is well researched, however much of this work requires 'police culture' to be considered from an outside perspective with policing as a macho endeavour as a subsection of wider society as a whole. Whilst subcultures within policing are recognised, and some study has taken place within various subsections, armed policing – and in particular the barriers and motivations to joining armed policing units – remains under-explored.

The findings however do support the notion of a hyper-masculine subculture within armed policing, where women do not feel they are likely to be accepted or indeed welcome. This cultural blocker is without doubt a significant contributing factor to women not pursuing armed policing as a career despite this, and the previous work of Brown and Sargent (1995), indicating a similar interest in the role across genders.

Loftus' (2009) assertion that much of police culture devalues 'softer' approaches to policing is called into question with this research, with the findings of the Bem Sex-Role Inventory (BSRI) testing. With male and female traits being largely equal in their desirability to all parties, and negligible difference in their desirability in an AFO compared to the 'generic' police officer role, it could be argued that cultural change is coming about in recognising the value of these 'softer' approaches which

may translate to an understanding of the value of a range of approaches across all areas of policing.

This research suggests that perceptions of desirable traits of AFOs do not differ across genders, and the hypotheses that masculine traits would be considered more desirable in armed policing has been shown to be invalid, as does the belief that individuals are likely to see additional value in those behaviour traits aligned to their own gender.

Findings support Reiner's (2010) assertion that policing is an environment for thrill-seeking, although the self-determination status of officers to consider themselves thrill-seekers appears otherwise, with many being neutral or indeed disagreeing with such a suggestion. However, when considering armed policing, the potential for a greater level (or a greater frequency) of excitement would seem to play a part in motivating applicants. How this relates to a desire to avoid 'rubbish' or 'bullshit' jobs however remains to be seen.

Implications

One of the stark findings of this research has been how sections of the workforce feel unwelcome or excluded from armed policing. Women and disabled officers in particular felt that they would not easily fit into the ethos of an armed policing unit, and this is something that police forces should address. No respondents described the weapons, equipment or the ancillary skills or abilities as inherently 'macho' (such as driving and fitness) as reasons for not pursing the specialism. The findings clearly suggest that the specialism struggles to appeal to a wider set of would-be AFOs because of its perceived inaccessibility and lack of open, inclusive culture.

To increase the representation of women and other minority groups, steps should be taken to make the department as accessible to non-members as possible. Whilst forces continue to hold recruitment drives aimed at females, and positive discrimination campaigns to ensure underrepresented individuals are accepted

ahead of others, much is made of the 'tangible' features of armed policing such as seeking to address concerns about the ability to hold a weapon, shoot correctly and demonstrating adequate levels of strength and fitness. These are not, however, issues that seem to be of significant concern to would-be applicants, instead it is one of culture and acceptance. Reforming the culture of armed policing, which appears to act as a barrier to recruitment, should be a priority for police forces.

Part of addressing perceptions of culture within armed policing may include the general accessibility of the teams. A majority of Non-AFOs indicated that they felt armed policing was inaccessible to them, and this was similar for AFOs where a third suggested likewise. Accepting the operational requirements for aspects of armed policing to remain detached, for example for safety and anonymity purposes, the opening-up of the working environment of AFOs could be an option for forces to consider. In addition to making the role accessible to would-be AFOs this increased accessibility would also serve to make the wider policing organisation more accessible to AFOs, who this research suggests feel an element of being closed-off from colleagues.

Improved accessibility at the operational level between armed and unarmed officers may also serve to address the feelings of acrimony suggested by this research. With AFOs expressing an opinion of being poorly perceived by their unarmed counterparts, a more transparent working environment may ultimately contribute toward a better understanding of the role and demands of the AFO.

Limitations and future research

This research was based upon 287 responses to an online questionnaire to police officers across a multi-force area which share a collaborated armed policing function. The policing area can be considered typical of most non-metropolitan county forces in England and Wales. This approach allowed for a wider variety of experiences to be captured by making the process accessible to a larger audience of participants. However, this approach did not allow for rich, qualitative supporting

data to be captured, as was the initial intention through a mixed-method approach, for reasons outlined in the Methods chapter.

While this quantitative approach allowed for easier identification of trends and attitudes, as well as providing an accessible dataset for the testing of associations, the lack of qualitative exploration leaves much of the 'but why?' discussion unanswered. The method undertaken has shown a number of interesting associations, most notably when considering gender as a variable, however the research did not allow for an explanation as to *why* individuals responded to questions in the way that they did. For example, whilst this research has shown female officers believe themselves to be less welcome onto a team of AFOs, the question of why that is remains unspecific, and is left to the suppositions drawn from other research to offer potential explanations.

Whilst much of this research and its findings are supported by existing literature, the idea of police culture being non-monolithic in nature, combined with nuances not only across different police forces, but across different geographic locations within a single force area, presented problems in examining a subculture of policing in traditional terms. The various elements that make up 'police culture', ranging from machismo and secrecy, to thrill-seeking and status, comprise a large area for exploration and so this research has had to focus on a select number of topics in its application to armed policing.

The concept of 'status' within policing specialisms may be an important source of further study. This research found that the AFO status played little part in influencing an individual's decision to apply, yet upon entering the role of armed policing the vast majority of AFOs indicated they liked the status. This change in attitude suggests a shift in feeling upon joining firearms units and future research to explore this through a qualitative approach may wish to follow individuals as they embark on a journey through the recruitment and training stages of becoming an AFO, to better understand how various attitudes change while an officer undertakes transition from Non-AFO to AFO.

Self-reflection

I have sought to undertake research into an area of policing which I am directly involved in, which has potential to understand and influence perceptions of a vital, yet largely unresearched, specialism. The process has challenged me both personally and professionally; personally, I have been pushed to explore research methods and sociological concepts which extend far beyond any previous educational experiences, and professionally I have found my own experiences and opinions, shaped after more than a decade of policing, challenged and conflicted in an environment where I must force myself to remain neutral.

In particular, my contribution to the topic on the issue of underrepresentation of certain groups, especially that of gender, supported previous research that armed policing is not a topic which simply does not interest many females. Instead, one of the biggest challenges facing armed policing units is how they make themselves open to the wider policing family in a way which presents an imagine to underrepresented groups that they will be welcome and accepted 'as they are', rather than forced to adhere or adapt to a culture or image that is perhaps not as they would perceive it to be.

The value in mixed-gender teams has a role in ensuring that the strengths within a team are balanced, however this research supports the notion that the perception of just how valued individual characteristics are is perhaps not as gender-centred as others may think. What has perhaps historically been perceived as 'masculine' or 'feminine' behaviour may not be quite so clear-cut as we move forward and the definition of Bem's characteristics may now need review just to understand how strongly a trait aligns with a particular gender in today's society. Certainly, this research supports the view that men and women attribute near-equal value to behaviours and there are few instances where the two genders differ on their view about what makes a 'good' firearms officer.

I have found researching the concept of 'status' a challenging experience, as whilst many of the AFO respondents attributed a notable level of enjoyment in the status

they feel they hold, the exploration of what that status is and the difference in self-perception and the perception of peers has not been without difficulty for me. To what extent the potential status of being an AFO drove my own ambition, and how I perceive that status having been successful in my endeavours, has led to some challenges in interpreting both the views of AFOs and their Non-AFO colleagues. As a researcher who through lived experience holds a deep-rooted perception that the AFO status is a positive, it has not been easy to reverse that position in trying to consider exactly how it could be perceived negatively.

This research has proven to be hugely rewarding and I now find myself in a position of wanting to take my academic experiences further in the pursuit of better understanding why individuals volunteer to become AFOs in Britain. At times I have felt that my research has been spread too widely and upon reflection would have preferred a smaller scope of areas for exploration. To examine gender, status, danger and career progression has, I suggest, been too much for a single piece of work, and it would be my view that these would be viable individual research topics for other academics interested in the role of armed policing going forward.

Conclusion

This research suggests the perceptions of armed policing are not monolithic in nature whilst firearms within policing is still perceived as hyper-masculine, however when this is considered through the lens of gendered behaviours and abilities this research indicates a level playing field. And so, if neither AFOs nor Non-AFOs believe that armed policing is an environment which particularly necessitates masculine behaviours, we are left to ponder what it is that promotes this hyper-masculine perception.

Rather than concentrating on positive discrimination campaigns that focus on allaying fears about strength, fitness and the quantifiable tangible skills such as driving and shooting, armed policing should focus on exposing their culture to the wider organisation and where possible focus on changing this behaviour as an

enabler to better, more representative recruitment. Despite the efforts of many to improve the armed policing environment however, this research journey has shown these findings to have been consistent over the last two decades, and that the barriers and motivations to both male and female police officers to pursuing an armed policing career continue to exist with little change.

Appendix A – Table of question categories

Theme	Topic/Question	Answered by	Rationale for Inclusion
Profiling Questions	Gender Age Ethnicity Religion Disability Length of Service Current Rank Current Role Current or former AFO Ever applied to become an AFO	All	To allow for comparison and understand AFO/non-AFO demographic.
	Current view on police use of firearms.	All	To identify whether the regular use and exposure of a firearm as part of daily policing influences opinion on their issue.
	Experience of firearms outside of policing.	All	To identify whether exposure to firearms prior to, or outside of policing, acts as a motivation or barrier to becoming an AFO.
	Consideration of becoming an AFO prior to joining.	All	To identify whether a certain group join with the intention of becoming an AFO, or at what point AFO becomes an area of interest during the career.
	Whether the AFO role and training met expectations.	AFOs	To understand whether perceptions were consistent with reality.

	Knowledge of the AFO role and training.	Non-AFOs	To understand how well informed the Non-AFO demographic is about the role.
Danger, Excitement, Thrill-seeking	Frequency of exposure to danger and excitement.	All	To compare perceptions of danger and excitement.
	Influence of the concepts of danger and excitement in the decision to apply/not apply for AFO.	All	To understand how danger and excitement influenced career decisions.
	The risk to AFOs compared to other roles and the danger and excitement of the role.	All	To understand how the AFO role is viewed in terms of risk, danger and excitement.
	Self-identification as a thrill-seeker.	All	To compare whether some groups consider themselves to be thrill-seekers, compared with others.
Gender, acceptance and accessibility	Desirability of behaviour traits in a police officer.	All	To compare how groups perceive the desirability of certain behaviours in police officers.
	Desirability of behaviour traits in a AFOs.	All	To compare how groups perceive the desirability of certain behaviours in AFOs.
	Accessibility of armed policing units to non-AFOs.	All	To explore whether armed policing is perceived as an open and welcoming area of policing, and how this may change based on demographic.

	Effectiveness of men and women as AFOs.	All	To explore perceptions of the AFO role and also perceptions of the suitability of men and women in the context of female under-representation.
	Individual compatibility and acceptance into an armed policing role.	All	To explore whether certain groups feel excluded from armed policing
Barriers and Motivators	Motivation to becoming a police officer.	All	To explore individual reasons for becoming a police officer and identify patterns within certain demographic groups.
	Motivation for undertaking current role.	All	To explore reasons for volunteering to become an AFO and look for trends in motivation.
	Individual career intentions and promotion prospects.	All	To explore how the AFO is perceived in the context of career progression.
	Perception of AFOs by peers and senior officers.	All	To explore how individuals feel the specialism is viewed by others.
	Prospects for AFOs both in and out of policing.	All	To explore whether career prospects are seen as a barrier or motivator to becoming an AFO.
	Importance of the AFO status and the part in played in applying.	AFOs	To understand the effect of 'status' within AFOs and the influence that has on the decision to undertake the role.
	Cultural, religious and disability compatibility of the AFO role.	All	To explore whether the AFO role is compatible with individual beliefs, ethics, values etc. and to what extent that acts as a barrier or motivator to becoming an AFO.

Appendix B – Original 60 behaviour traits from the Bem Sex-Role Inventory

Masculine Items	Feminine Items	Neutral Items
Acts as a leader	Affectionate	Adaptable
Aggressive	Cheerful	Conceited
Ambitious	Childlike	Conscientious
Analytical	Compassionate	Conventional
Assertive	Does not use harsh language	Friendly
Athletic	Eager to soothe hurt feelings	Happy
Competitive	Feminine	Helpful
Defends own beliefs	Flatterable	Inefficient
Dominant	Gentle	Jealous
Forceful	Gullible	Likeable
Has leadership abilities	Loves children	Moody
Independent	Loyal	Reliable
Individualistic	Sensitive to the needs of others	Secretive
Makes decisions easily	Shy	Sincere
Masculine	Soft spoken	Solemn
Self-reliant	Sympathetic	Tactful
Self-sufficient	Tender	Theatrical
Strong personality	Understanding	Truthful
Willing to take a stand	Warm	Unpredictable
Willing to take risks	Yielding	Unsystematic

Indicates use of the trait in this research *(masculine trait inclusion determined by Auster and Ohm (2000), feminine and neutral traits determined by random number generation.)*

Appendix C – Participant Information page

Background

You are invited to participate in research seeking to examine what motivates or dissuades police officers from volunteering to become an Authorised Firearms Officer (AFO), and how AFOs are perceived within policing. The views of both non-AFOs and AFOs are sought, and officers of all ranks and backgrounds are invited to participate.

The research is being conducted by Joe Simon, a Masters Student at Canterbury Christ Church University and a serving Police Sergeant and AFO, supervised by Professor Robin Bryant.

It should take approximately 20 minutes to complete the survey.

What will you be required to do?

Participants in this study will be required to answer a variety of questions through an online questionnaire in relation to their views on various aspects of both armed and unarmed policing. Further questions will examine participant experiences and perceptions in relation to their career progress, the decisions they have made in relation to their own development and their reasons for either considering or disregarding a career as an AFO.

To participate in this research you must:

- Be a serving Police Officer of any rank or role.

Deciding whether to participate

If you have any questions or concerns about the nature, procedures or requirements for participation do not hesitate to contact me. Should you decide to participate, you will be free to (i) withdraw consent at any time without having to give a reason, (ii) request to see all your personal data held in association with this project, (iii) request that the processing of your personal data is restricted, (iv) request that your personal data is erased and no longer used for processing.

Process for withdrawing consent

Should you wish to withdraw your consent you may do so at any time. Please contact the researcher via e-mail and arrangements will be made for your data to be removed from the results.

Procedures

You will be asked to log on to an online questionnaire, either at work or at home, and answer a number of questions about your views and experiences.

Feedback and Dissemination of Results

You will receive no automatic feedback from participating in this research, however if you wish to receive a summary of findings upon completion, or wish to find out more, then you can contact the researcher, in confidence, via e-mail at j.d.simon1010@canterbury.ac.uk.

A copy of the research thesis will be submitted to CCCU and may be available from the university library upon completion.

Confidentiality and Data Protection

On the legal basis of consent all data and personal information will be stored securely within CCCU premises in accordance with the General Data Protection Regulation (GDPR) and the University's own data protection policies. No unrelated or unnecessary personal data will be collected or stored. The following categories of personal data will be processed; your age, gender and ethnicity as submitted as part of the questionnaire, and your e-mail address should you choose to provide it. Personal data will be used only as part of the research and to contact the participant with feedback should the participant give their consent. Data can only be accessed by the researcher, their supervisor(s) and any examiner. The data will not leave the EEA.

Individual responses will not be shared with police forces; therefore your responses will remain anonymous. No-one will be able to identify you from your answers.

At the end of the questionnaire you will be asked if you are interested in participating in any form of follow-up. If you choose to provide contact details such as your name and e-mail address, your questionnaire responses may no longer be anonymous to the researcher.

After completion of the study, all data will be made anonymous (i.e. all personal information associated with the data will be removed) and held for a period of 5 years from the time of collection.

Contact and Questions

You can contact the researcher by e-mail at j.d.simon1010@canterbury.ac.uk with any questions or concerns, or alternatively via the below address:

Canterbury Christ Church University

School of Law, Criminal Justice and Computing

North Holmes Road

Canterbury

Kent, CT1 1QU

Electronic Consent

Clicking to proceed and completing this questionnaire indicates that:

- You have read and understood the participant information (above) for the study and have had the opportunity to ask questions prior to participating.
- You voluntarily agree to participate and that you understand you are free to withdraw at any time without giving any reason. Participation is voluntary and non-participation will not be disclosed.
- You understand that any personal information that you provide to the researchers will be kept strictly confidential.
- You understand that any disclosures made as part of this questionnaire which amount to gross misconduct or criminality can be reported under the Codes of Ethics.
- You understand data can be used in publications and will be presented to protect anonymity.
- You meet the eligibility criteria for participation in this study.

Appendix D – Frequency Table for respondent age and length of service by gender

Males (n=226)

Age Range	**20-25**	**26-30**	**31-35**	**36-40**	**41-45**	**46-50**	**Over 50**	**TOTAL**
Freq. (f)	14	58	40	33	35	28	18	**226**
Mid-point (x)	22.5	28	33	38	43	48	55	
(fx)	315	1624	1320	1254	1505	1344	990	**8352**

Mean = 8352/226 = **37.0 years old**

Length of service	**0-2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**Over 30**	**TOTAL**
Freq. (f)	24	50	31	48	50	13	7	3	**226**
Mid-point (x)	1	3.5	8	13	18	23	28	33	
(fx)	24	175	248	624	900	299	196	99	**2565**

Mean = 2565/226 = **11.3 years of police service**

Females (n=61)

Age Range	**20-25**	**26-30**	**31-35**	**36-40**	**41-45**	**46-50**	**Over 50**	**TOTAL**
Freq. (f)	7	9	6	21	12	4	2	**61**
Mid-point (x)	22.5	28	33	38	43	48	55	
(fx)	157.5	252	198	798	516	192	110	**2223.5**

Mean = 2223.5/61 = **36.5 years old**

Length of service	**0-2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**Over 30**	**TOTAL**
Freq. (f)	11	9	10	15	10	3	3	0	**61**
Mid-point (x)	1	3.5	8	13	18	23	28	33	
(fx)	11	31.5	80	195	180	69	84	0	**650.5**

Mean = 650.5/61 = **10.7 years of police service**

Appendix E – Contingency table – Rank by gender

	Constable	Sergeant	Inspector and above	Total
Male	188 [185.84] (0.03)	28 [26.77] (0.06)	10 [13.38] (0.86)	226
Female	48 [50.16] (0.09)	6 [7.23] (0.21)	7 [3.61] (3.17)	61
Total	236	34	17	287

Chi-square (χ^2) = 4.41

P = 0.110042

Appendix F – Frequency Table for respondent age and length of service (by AFO/Non-AFO status)

AFOs (n=34)

Age Range	**20-25**	**26-30**	**31-35**	**36-40**	**41-45**	**46-50**	**Over 50**	**TOTAL**
Freq. (f)	0	8	6	4	7	6	3	**34**
Mid-point (x)	22.5	28	33	38	43	48	55	
(fx)	0	224	198	152	301	288	165	**1328**

Mean = 1328/34 = **39.1 years old**

Length of service	**0-2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**Over 30**	**TOTAL**
Freq. (f)	0	5	6	8	9	3	3	0	**34**
Mid-point (x)	1	3.5	8	13	18	23	28	33	
(fx)	0	17.5	48	104	162	69	84	0	**484.5**

Mean = 484.5/34 = **14.25 years of police service**

Non-AFOs (n=253)

Age Range	**20-25**	**26-30**	**31-35**	**36-40**	**41-45**	**46-50**	**Over 50**	**TOTAL**
Freq. (f)	21	59	40	50	40	26	17	**253**
Mid-point (x)	22.5	28	33	38	43	48	55	
(fx)	472.5	1652	1320	1900	1720	1248	935	**9247.5**

Mean = 9247.5/253 = **36.6 years old**

Length of service	**0-2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**Over 30**	**TOTAL**
Freq. (f)	35	54	35	55	51	13	7	3	**253**
Mid-point (x)	1	3.5	8	13	18	23	28	33	
(fx)	35	189	280	715	918	299	196	99	**2731**

Mean = 2731/253 = **10.8 years of police service**

Male AFOs (n=32)

Age Range	**20-25**	**26-30**	**31-35**	**36-40**	**41-45**	**46-50**	**Over 50**	**TOTAL**
Freq. (f)	0	8	6	3	6	6	3	**32**
Mid-point (x)	22.5	28	33	38	43	48	55	
(fx)	0	224	198	114	258	288	165	**1247**

Mean = 1247/32 = **39.0 years old**

Length of service	**0-2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**Over 30**	**TOTAL**
Freq. (f)	0	5	6	8	7	3	3	0	**32**
Mid-point (x)	1	3.5	8	13	18	23	28	33	
(fx)	0	17.5	48	104	126	69	84	0	**448.5**

Mean = 448.5/32 = **14.0 years of police service**

Female AFOs (n=2)

Age Range	**20-25**	**26-30**	**31-35**	**36-40**	**41-45**	**46-50**	**Over 50**	**TOTAL**
Freq. (f)	0	0	0	1	1	0	0	**2**
Mid-point (x)	22.5	28	33	38	43	48	55	
(fx)	0	0	0	38	43	0	0	**81**

Mean = 81/2 = **40.5 years old**

Length of service	**0-2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**Over 30**	**TOTAL**
Freq. (f)	0	0	0	0	2	0	0	0	**2**
Mid-point (x)	1	3.5	8	13	18	23	28	33	
(fx)	0	0	0	0	36	0	0	0	**36**

Mean = 36/2 = **18.0 years of police service**

Male Non-AFOs (n=194)

Age Range	**20-25**	**26-30**	**31-35**	**36-40**	**41-45**	**46-50**	**Over 50**	**TOTAL**
Freq. (f)	14	50	34	30	29	22	15	**194**
Mid-point (x)	22.5	28	33	38	43	48	55	
(fx)	315	1400	1122	1140	1247	1056	825	**7105**

Mean = 7105/194 = **36.6 years old**

Length of service	**0-2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**Over 30**	**TOTAL**
Freq. (f)	24	45	25	40	43	10	4	3	**194**
Mid-point (x)	1	3.5	8	13	18	23	28	33	
(fx)	24	157.5	200	520	774	230	112	99	**2116.5**

Mean = 2116.5/194 = **10.9 years of police service**

Female Non-AFOs (n=59)

Age Range	**20-25**	**26-30**	**31-35**	**36-40**	**41-45**	**46-50**	**Over 50**	**TOTAL**
Freq. (f)	7	9	6	20	11	4	2	**59**
Mid-point (x)	22.5	28	33	38	43	48	55	
(fx)	157.5	252	198	760	473	192	110	**2142.5**

Mean = 2142.5/59 = **36.3 years old**

Length of service	**0-2**	**2-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**Over 30**	**TOTAL**
Freq. (f)	11	9	10	15	8	3	3	0	**59**
Mid-point (x)	1	3.5	8	13	18	23	28	33	
(fx)	11	31.5	80	195	144	69	84	0	**614.5**

Mean = 614.5/59 = **10.4 years of police service**

Appendix G – SPSS Output for Chi-Square analysis: Respondent view on police issue and use of firearms, by gender.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * View on police firearms	287	100.0%	0	0.0%	287	100.0%

Gender * View on police firearms Crosstabulation

			View on police firearms					
			All police officers should receive appropriate training and be armed AT ALL TIMES, ON AND OFF DUTY.	All police officers should receive appropriate training and be armed ON DUTY BUT NOT OFF DUTY.	ALL POLICE OFFICERS should receive appropriate training and firearms should be issued to them AS AND WHEN NECESSARY.	Firearms should not be issued to all police officers, but more officers should receive appropriate training cont	The present number of officers who are specially trained to carry firearms is about right.	Total
Gender	Male	Count	16	39	37	110	24	226
		Expected Count	12.6	36.2	33.1	116.5	27.6	226.0
		% within Gender	7.1%	17.3%	16.4%	48.7%	10.6%	100.0%
	Female	Count	0	7	5	38	11	61
		Expected Count	3.4	9.8	8.9	31.5	7.4	61.0
		% within Gender	0.0%	11.5%	8.2%	62.3%	18.0%	100.0%
Total		Count	16	46	42	148	35	287
		Expected Count	16.0	46.0	42.0	148.0	35.0	287.0
		% within Gender	5.6%	16.0%	14.6%	51.6%	12.2%	100.0%

Chi-Square Tests

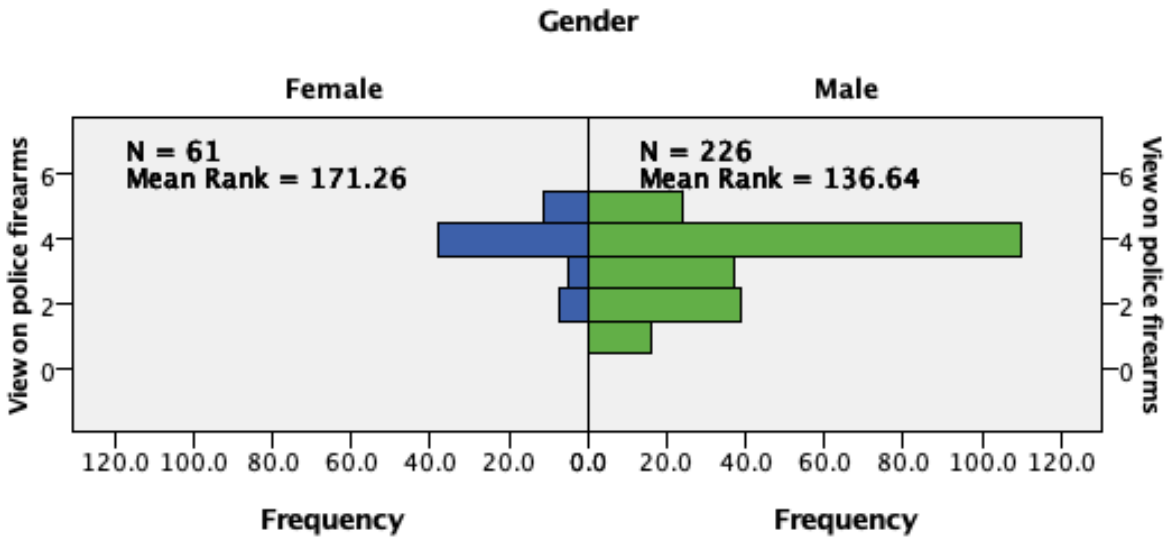
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	11.407[a]	4	.022	.022		
Likelihood Ratio	14.851	4	.005	.006		
Fisher's Exact Test	11.762			.017		
Linear-by-Linear Association	9.757[b]	1	.002	.002	.001	.000
N of Valid Cases	287					

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 3.40.

b. The standardized statistic is 3.124.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.199	.022	.022
	Cramer's V	.199	.022	.022
N of Valid Cases		287		


Gender
Female
Male
N = 61
Mean Rank = 171.26
N = 226
Mean Rank = 136.64
View on police firearms
View on police firearms
6
4
2
0
120.0 100.0 80.0 60.0 40.0 20.0 0.0 20.0 40.0 60.0 80.0 100.0 120.0
Frequency
Frequency

Appendix H - SPSS Output for Chi-Square analysis: Experience of firearms outside of policing by AFO status and gender.

AFO Status

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Current or former AFO * Experience of firearms	287	100.0%	0	0.0%	287	100.0%

Current or former AFO * Experience of firearms Crosstabulation

			Experience of firearms					Total
			I am a regular user of firearms / I own a firearm.	I have had frequent exposure to firearms in the past.	I have had some exposure to firearms in the past.	I have had little exposure to firearms in the past.	I have never been exposed to firearms.	
Current or former AFO	Yes	Count	7	11	4	7	5	34
		Expected Count	2.5	5.4	8.2	10.3	7.6	34.0
		% within Current or former AFO	20.6%	32.4%	11.8%	20.6%	14.7%	100.0%
	No	Count	14	35	65	80	59	253
		Expected Count	18.5	40.6	60.8	76.7	56.4	253.0
		% within Current or former AFO	5.5%	13.8%	25.7%	31.6%	23.3%	100.0%
Total		Count	21	46	69	87	64	287
		Expected Count	21.0	46.0	69.0	87.0	64.0	287.0
		% within Current or former AFO	7.3%	16.0%	24.0%	30.3%	22.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	20.316[a]	4	.000	.001		
Likelihood Ratio	17.174	4	.002	.002		
Fisher's Exact Test	17.258			.001		
Linear-by-Linear Association	12.159[b]	1	.000	.000	.000	.000
N of Valid Cases	287					

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 2.49.

b. The standardized statistic is 3.487.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.266	.000	.001
	Cramer's V	.266	.000	.001
N of Valid Cases		287		

By Gender

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Experience of firearms	287	100.0%	0	0.0%	287	100.0%

Gender * Experience of firearms Crosstabulation

			Experience of firearms					Total
			I am a regular user of firearms / I own a firearm.	I have had frequent exposure to firearms in the past.	I have had some exposure to firearms in the past.	I have had little exposure to firearms in the past.	I have never been exposed to firearms.	
Gender	Male	Count	20	41	58	72	35	226
		Expected Count	16.5	36.2	54.3	68.5	50.4	226.0
		% within Gender	8.8%	18.1%	25.7%	31.9%	15.5%	100.0%
	Female	Count	1	5	11	15	29	61
		Expected Count	4.5	9.8	14.7	18.5	13.6	61.0
		% within Gender	1.6%	8.2%	18.0%	24.6%	47.5%	100.0%
Total		Count	21	46	69	87	64	287
		Expected Count	21.0	46.0	69.0	87.0	64.0	287.0
		% within Gender	7.3%	16.0%	24.0%	30.3%	22.3%	100.0%

Chi-Square Tests

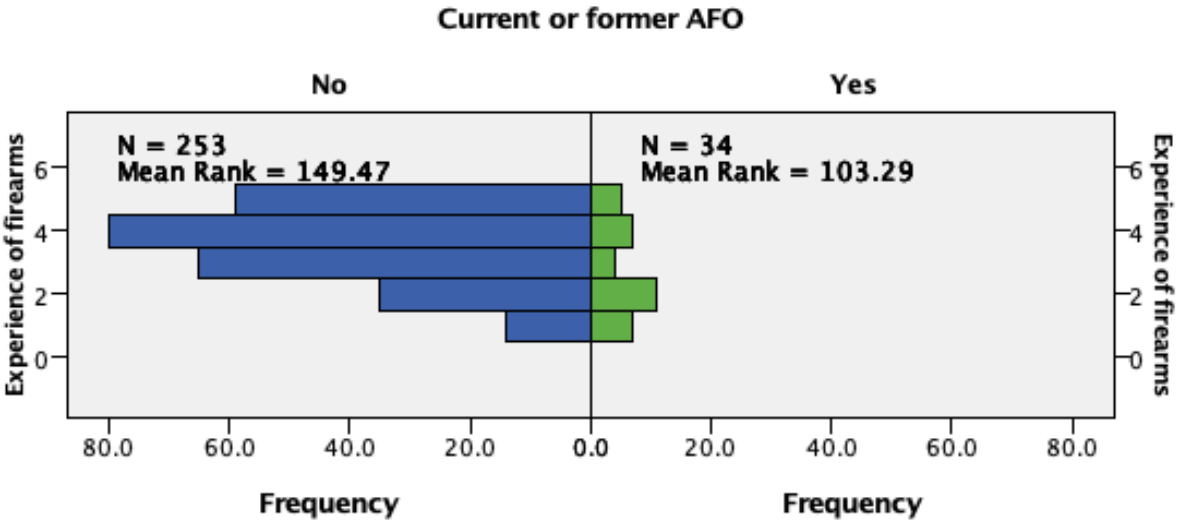
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	30.510[a]	4	.000	.000		
Likelihood Ratio	28.578	4	.000	.000		
Fisher's Exact Test	26.965			.000		
Linear-by-Linear Association	21.735[b]	1	.000	.000	.000	.000
N of Valid Cases	287					

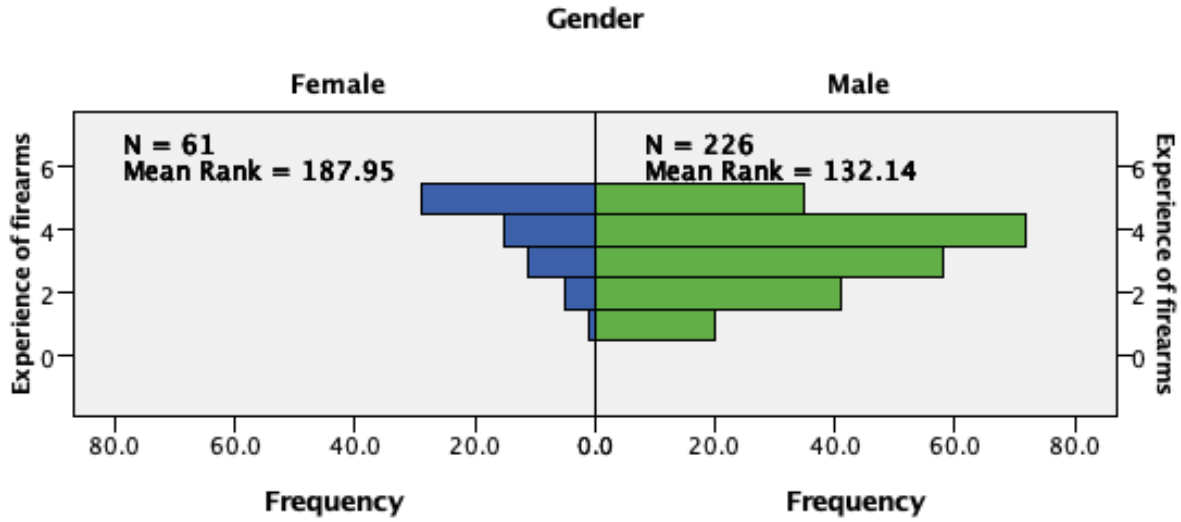
a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.46.

b. The standardized statistic is 4.662.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.326	.000	.000
	Cramer's V	.326	.000	.000
N of Valid Cases		287		


Current or former AFO
No
Yes
N = 253
Mean Rank = 149.47
N = 34
Mean Rank = 103.29
Experience of firearms
Experience of firearms
0
2
4
6
80.0
60.0
40.0
20.0
0.0
20.0
40.0
60.0
80.0
Frequency
Frequency


Gender
Female
Male
N = 61
Mean Rank = 187.95
N = 226
Mean Rank = 132.14
Experience of firearms
Experience of firearms
0
2
4
6
80.0
60.0
40.0
20.0
0.0
20.0
40.0
60.0
80.0
Frequency
Frequency

Appendix I – SPSS Output for Chi-Square analysis: "I consider myself to be a thrill-seeker" by AFO status.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Current or former AFO * UA is thrill seeker	287	100.0%	0	0.0%	287	100.0%

Current or former AFO * UA is thrill seeker Crosstabulation

			UA is thrill seeker					
			Strongly disagree	Disagree	Neither	Agree	Strongly agree	Total
Current or former AFO	Yes	Count	7	12	14	1	0	34
		Expected Count	7.5	11.6	10.0	3.9	1.1	34.0
		% within Current or former AFO	20.6%	35.3%	41.2%	2.9%	0.0%	100.0%
	No	Count	56	86	70	32	9	253
		Expected Count	55.5	86.4	74.0	29.1	7.9	253.0
		% within Current or former AFO	22.1%	34.0%	27.7%	12.6%	3.6%	100.0%
Total		Count	63	98	84	33	9	287
		Expected Count	63.0	98.0	84.0	33.0	9.0	287.0
		% within Current or former AFO	22.0%	34.1%	29.3%	11.5%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5.582[a]	4	.233	.226		
Likelihood Ratio	7.378	4	.117	.133		
Fisher's Exact Test	4.799			.276		
Linear-by-Linear Association	.615[b]	1	.433	.437	.245	.052
N of Valid Cases	287					

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.07.

b. The standardized statistic is .784.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.139	.233	.226
	Cramer's V	.139	.233	.226
N of Valid Cases		287		

Appendix J – SPSS Output for Ch-Square analysis: "I consider myself to be a thrill-seeker" by gender

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * UA is thrill seeker	287	100.0%	0	0.0%	287	100.0%

Gender * UA is thrill seeker Crosstabulation

			UA is thrill seeker					
			Strongly disagree	Disagree	Neither	Agree	Strongly agree	Total
Gender	Male	Count	50	77	64	28	7	226
		Expected Count	49.6	77.2	66.1	26.0	7.1	226.0
		% within Gender	22.1%	34.1%	28.3%	12.4%	3.1%	100.0%
	Female	Count	13	21	20	5	2	61
		Expected Count	13.4	20.8	17.9	7.0	1.9	61.0
		% within Gender	21.3%	34.4%	32.8%	8.2%	3.3%	100.0%
Total		Count	63	98	84	33	9	287
		Expected Count	63.0	98.0	84.0	33.0	9.0	287.0
		% within Gender	22.0%	34.1%	29.3%	11.5%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	1.083[a]	4	.897	.903		
Likelihood Ratio	1.135	4	.889	.896		
Fisher's Exact Test	1.119			.904		
Linear-by-Linear Association	.029[b]	1	.866	.891	.462	.054
N of Valid Cases	287					

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 1.91.

b. The standardized statistic is -.169.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.061	.897	.903
	Cramer's V	.061	.897	.903
N of Valid Cases		287		

Appendix K – SPSS Output for Ch-Square analysis: "The work of AFOs is more dangerous than most other aspects of policing" by AFO status

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Current or former AFO * UA AFO role more dangerous	287	100.0%	0	0.0%	287	100.0%

Current or former AFO * UA AFO role more dangerous Crosstabulation

			UA AFO role more dangerous					
			Strongly disagree	Disagree	Neither	Agree	Strongly agree	Total
Current or former AFO	Yes	Count	4	16	5	7	2	34
		Expected Count	4.3	11.8	7.7	9.4	.8	34.0
		% within Current or former AFO	11.8%	47.1%	14.7%	20.6%	5.9%	100.0%
	No	Count	32	84	60	72	5	253
		Expected Count	31.7	88.2	57.3	69.6	6.2	253.0
		% within Current or former AFO	12.6%	33.2%	23.7%	28.5%	2.0%	100.0%
Total		Count	36	100	65	79	7	287
		Expected Count	36.0	100.0	65.0	79.0	7.0	287.0
		% within Current or former AFO	12.5%	34.8%	22.6%	27.5%	2.4%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5.294[a]	4	.258	.243		
Likelihood Ratio	4.885	4	.299	.331		
Fisher's Exact Test	5.306			.230		
Linear-by-Linear Association	.384[b]	1	.535	.553	.297	.056
N of Valid Cases	287					

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is .83.

b. The standardized statistic is .620.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.136	.258	.243
	Cramer's V	.136	.258	.243
N of Valid Cases		287		

Appendix L – Behaviour trait analysis: Desirability in a Police Officer (by Gender)

Trait	Category	Chi-Square Value	p-value	Significant (< 0.05)
Tender	Feminine	14.935	0.013	Yes
Sympathetic	Feminine	11.339	0.054	No
Gentle	Feminine	21.006	0.001	Yes
Feminine	Feminine	8.387	0.165	No
Sensitive to the needs of others	Feminine	16.359	0.005	Yes
Loyal	Feminine	9.442	0.117	No
Compassionate	Feminine	4.957	0.408	No
Understanding	Feminine	2.915	0.717	No
Ambitious	Masculine	4.379	0.592	No
Leadership Abilities	Masculine	2.803	0.847	No
Dominant	Masculine	7.363	0.268	No
Forceful	Masculine	3.758	0.716	No
Masculine	Masculine	5.380	0.452	No
Independent	Masculine	9.355	0.125	No
Aggressive	Masculine	20.949	0.001	Yes
Acts like a leader	Masculine	2.305	0.795	No
Conscientious	Neutral	9.648	0.061	No
Adaptable	Neutral	4.056	0.518	No
Truthful	Neutral	5.271	0.213	No
Secretive	Neutral	15.423	0.013	Yes
Unpredictable	Neutral	10.133	0.052	No
Friendly	Neutral	12.812	0.016	Yes
Reliable	Neutral	3.831	0.436	No
Likeable	Neutral	1.571	0.917	No

Appendix M – Behaviour trait analysis: Desirability in a Police Officer (by AFO status)

Trait	Category	Chi-Square Value	p-value	Significant (< 0.05)
Tender	Feminine	8.670	0.138	No
Sympathetic	Feminine	7.979	0.235	No
Gentle	Feminine	3.083	0.778	No
Feminine	Feminine	5.237	0.488	No
Sensitive to the needs of others	Feminine	10.265	0.098	No
Loyal	Feminine	3.992	0.656	No
Compassionate	Feminine	9.692	0.077	No
Understanding	Feminine	4.941	0.417	No
Ambitious	Masculine	7.202	0.246	No
Leadership Abilities	Masculine	8.752	0.183	No
Dominant	Masculine	15.632	0.009	Yes
Forceful	Masculine	14.561	0.014	Yes
Masculine	Masculine	6.141	0.305	No
Independent	Masculine	2.860	0.834	No
Aggressive	Masculine	14.990	0.014	Yes
Acts like a leader	Masculine	2.164	0.795	No
Conscientious	Neutral	4.600	0.489	No
Adaptable	Neutral	4.022	0.508	No
Truthful	Neutral	1.291	0.870	No
Secretive	Neutral	5.119	0.498	No
Unpredictable	Neutral	4.167	0.479	No
Friendly	Neutral	1.389	0.915	No
Reliable	Neutral	4.597	0.315	No
Likeable	Neutral	4.624	0.432	No

Appendix N – Behaviour trait analysis: Desirability in an AFO (by Gender)

Trait	Category	Chi-Square Value	p-value	Significant (< 0.05)
Tender	Feminine	7.439	0.247	No
Sympathetic	Feminine	3.209	0.784	No
Gentle	Feminine	5.352	0.479	No
Feminine	Feminine	7.716	0.208	No
Sensitive to the needs of others	Feminine	4.605	0.570	No
Loyal	Feminine	9.048	0.138	No
Compassionate	Feminine	8.798	0.148	No
Understanding	Feminine	4.459	0.569	No
Ambitious	Masculine	8.624	0.158	No
Leadership Abilities	Masculine	4.144	0.519	No
Dominant	Masculine	8.452	0.193	No
Forceful	Masculine	5.261	0.492	No
Masculine	Masculine	2.769	0.847	No
Independent	Masculine	5.782	0.425	No
Aggressive	Masculine	16.612	0.008	Yes
Acts like a leader	Masculine	4.313	0.615	No
Conscientious	Neutral	16.043	0.007	Yes
Adaptable	Neutral	8.971	0.130	No
Truthful	Neutral	6.625	0.214	No
Secretive	Neutral	13.316	0.031	Yes
Unpredictable	Neutral	3.252	0.775	No
Friendly	Neutral	3.390	0.745	No
Reliable	Neutral	4.913	0.421	No
Likeable	Neutral	2.331	0.902	No

Appendix O – Behaviour trait analysis: Desirability in an AFO (by AFO status)

Trait	Category	Chi-Square Value	p-value	Significant (< 0.05)
Tender	Feminine	10.015	0.084	No
Sympathetic	Feminine	2.193	0.899	No
Gentle	Feminine	12.636	0.029	Yes
Feminine	Feminine	1.241	0.983	No
Sensitive to the needs of others	Feminine	5.158	0.451	No
Loyal	Feminine	8.441	0.211	No
Compassionate	Feminine	7.903	0.195	No
Understanding	Feminine	2.856	0.784	No
Ambitious	Masculine	6.561	0.303	No
Leadership Abilities	Masculine	4.092	0.549	No
Dominant	Masculine	11.333	0.055	No
Forceful	Masculine	3.362	0.744	No
Masculine	Masculine	5.724	0.341	No
Independent	Masculine	4.212	0.606	No
Aggressive	Masculine	4.859	0.544	No
Acts like a leader	Masculine	5.987	0.414	No
Conscientious	Neutral	3.681	0.715	No
Adaptable	Neutral	5.017	0.528	No
Truthful	Neutral	2.382	0.879	No
Secretive	Neutral	9.982	0.096	No
Unpredictable	Neutral	2.616	0.835	No
Friendly	Neutral	5.239	0.438	No
Reliable	Neutral	2.983	0.715	No
Likeable	Neutral	5.054	0.650	No

Appendix P – SPSS Output for Chi-Square analysis: Respondent view on accessibility of armed policing units, by gender and AFO status.

By Gender

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * UA armed unit accessibility	287	100.0%	0	0.0%	287	100.0%

Gender * UA armed unit accessibility Crosstabulation

			UA armed unit accessibility					
			Highly inaccessible	Inaccessible	Neutral	Accessible	Highly accessible	Total
Gender	Male	Count	33	78	80	30	5	226
		Expected Count	36.2	75.6	81.9	28.3	3.9	226.0
		% within Gender	14.6%	34.5%	35.4%	13.3%	2.2%	100.0%
	Female	Count	13	18	24	6	0	61
		Expected Count	9.8	20.4	22.1	7.7	1.1	61.0
		% within Gender	21.3%	29.5%	39.3%	9.8%	0.0%	100.0%
Total		Count	46	96	104	36	5	287
		Expected Count	46.0	96.0	104.0	36.0	5.0	287.0
		% within Gender	16.0%	33.4%	36.2%	12.5%	1.7%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3.718[a]	4	.446	.441		
Likelihood Ratio	4.700	4	.320	.358		
Fisher's Exact Test	3.067			.531		
Linear-by-Linear Association	1.370[b]	1	.242	.262	.137	.030
N of Valid Cases	287					

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.06.

b. The standardized statistic is -1.170.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.114	.446	.441
	Cramer's V	.114	.446	.441
N of Valid Cases		287		

By AFO status

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Current or former AFO * UA armed unit accessibility	287	100.0%	0	0.0%	287	100.0%

Current or former AFO * UA armed unit accessibility Crosstabulation

			UA armed unit accessibility					
			Highly inaccessible	Inaccessible	Neutral	Accessible	Highly accessible	Total
Current or former AFO	Yes	Count	1	9	11	10	3	34
		Expected Count	5.4	11.4	12.3	4.3	.6	34.0
		% within Current or former AFO	2.9%	26.5%	32.4%	29.4%	8.8%	100.0%
	No	Count	45	87	93	26	2	253
		Expected Count	40.6	84.6	91.7	31.7	4.4	253.0
		% within Current or former AFO	17.8%	34.4%	36.8%	10.3%	0.8%	100.0%
Total		Count	46	96	104	36	5	287
		Expected Count	46.0	96.0	104.0	36.0	5.0	287.0
		% within Current or former AFO	16.0%	33.4%	36.2%	12.5%	1.7%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	24.694[a]	4	.000	.000		
Likelihood Ratio	19.996	4	.001	.001		
Fisher's Exact Test	19.899			.000		
Linear-by-Linear Association	17.100[b]	1	.000	.000	.000	.000
N of Valid Cases	287					

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is .59.

b. The standardized statistic is -4.135.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.293	.000	.000
	Cramer's V	.293	.000	.000
N of Valid Cases		287		

Appendix Q – SPSS Output for Chi-Square analysis: Respondent view on how welcome they perceived they would be on a team of AFOs, by gender and disability status.

By Gender

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * UA someone like me welcome	287	100.0%	0	0.0%	287	100.0%

Gender * UA someone like me welcome Crosstabulation

			UA someone like me welcome					
			Strongly disagree	Disagree	Neither	Agree	Strongly agree	Total
Gender	Male	Count	17	43	73	78	15	226
		Expected Count	19.7	49.6	72.4	68.5	15.7	226.0
		% within Gender	7.5%	19.0%	32.3%	34.5%	6.6%	100.0%
	Female	Count	8	20	19	9	5	61
		Expected Count	5.3	13.4	19.6	18.5	4.3	61.0
		% within Gender	13.1%	32.8%	31.1%	14.8%	8.2%	100.0%
Total		Count	25	63	92	87	20	287
		Expected Count	25.0	63.0	92.0	87.0	20.0	287.0
		% within Gender	8.7%	22.0%	32.1%	30.3%	7.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	12.242[a]	4	.016	.015		
Likelihood Ratio	12.770	4	.012	.016		
Fisher's Exact Test	12.888			.010		
Linear-by-Linear Association	7.214[b]	1	.007	.008	.004	.001
N of Valid Cases	287					

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.25.

b. The standardized statistic is -2.686.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.207	.016	.015
	Cramer's V	.207	.016	.015
N of Valid Cases		287		

By disability status

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Disability * UA someone like me welcome	279	100.0%	0	0.0%	279	100.0%

Disability * UA someone like me welcome Crosstabulation

			UA someone like me welcome					
			Strongly disagree	Disagree	Neither	Agree	Strongly agree	Total
Disability	Yes	Count	7	10	6	4	0	27
		Expected Count	2.2	6.1	8.3	8.4	1.9	27.0
		% within Disability	25.9%	37.0%	22.2%	14.8%	0.0%	100.0%
	No	Count	16	53	80	83	20	252
		Expected Count	20.8	56.9	77.7	78.6	18.1	252.0
		% within Disability	6.3%	21.0%	31.7%	32.9%	7.9%	100.0%
Total		Count	23	63	86	87	20	279
		Expected Count	23.0	63.0	86.0	87.0	20.0	279.0
		% within Disability	8.2%	22.6%	30.8%	31.2%	7.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	19.533[a]	4	.001	.001		
Likelihood Ratio	18.037	4	.001	.001		
Fisher's Exact Test	16.069			.002		
Linear-by-Linear Association	16.796[b]	1	.000	.000	.000	.000
N of Valid Cases	279					

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.94.

b. The standardized statistic is 4.098.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.265	.001	.001
	Cramer's V	.265	.001	.001
N of Valid Cases		279		

Appendix R – SPSS Output for Chi-Square analysis: Respondent's motivation for becoming a police officer, by gender.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * UA motivation to become PO	287	100.0%	0	0.0%	287	100.0%

Gender * UA motivation to become PO Crosstabulation

			UA motivation to become PO									
			Childhood dream	Avoid desk job. Fast cars and chasing criminals.	Help others, give back to society.	Good salary, pension, career prospects. Not a vocation.	Graduate – quick promotion.	Discipline to get back on the straight and narrow.	Come from other careers. Policing the next logical step.	Previously a Special Constable.	Cannot remember motivation for joining.	Total
Gender	Male	Count	44	40	51	29	2	2	35	14	9	226
		Expected Count	38.6	37.8	58.3	25.2	2.4	1.6	35.4	15.7	11.0	226.0
		% within Gender	19.5%	17.7%	22.6%	12.8%	0.9%	0.9%	15.5%	6.2%	4.0%	100.0%
	Female	Count	5	8	23	3	1	0	10	6	5	61
		Expected Count	10.4	10.2	15.7	6.8	.6	.4	9.6	4.3	3.0	61.0
		% within Gender	8.2%	13.1%	37.7%	4.9%	1.6%	0.0%	16.4%	9.8%	8.2%	100.0%
Total		Count	49	48	74	32	3	2	45	20	14	287
		Expected Count	49.0	48.0	74.0	32.0	3.0	2.0	45.0	20.0	14.0	287.0
		% within Gender	17.1%	16.7%	25.8%	11.1%	1.0%	0.7%	15.7%	7.0%	4.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	14.636[a]	8	.067	.068		
Likelihood Ratio	15.574	8	.049	.[b]		
Fisher's Exact Test	14.864			.045		
Linear-by-Linear Association	3.260[c]	1	.071	.074	.039	.005
N of Valid Cases	287					

a. 6 cells (33.3%) have expected count less than 5. The minimum expected count is .43.

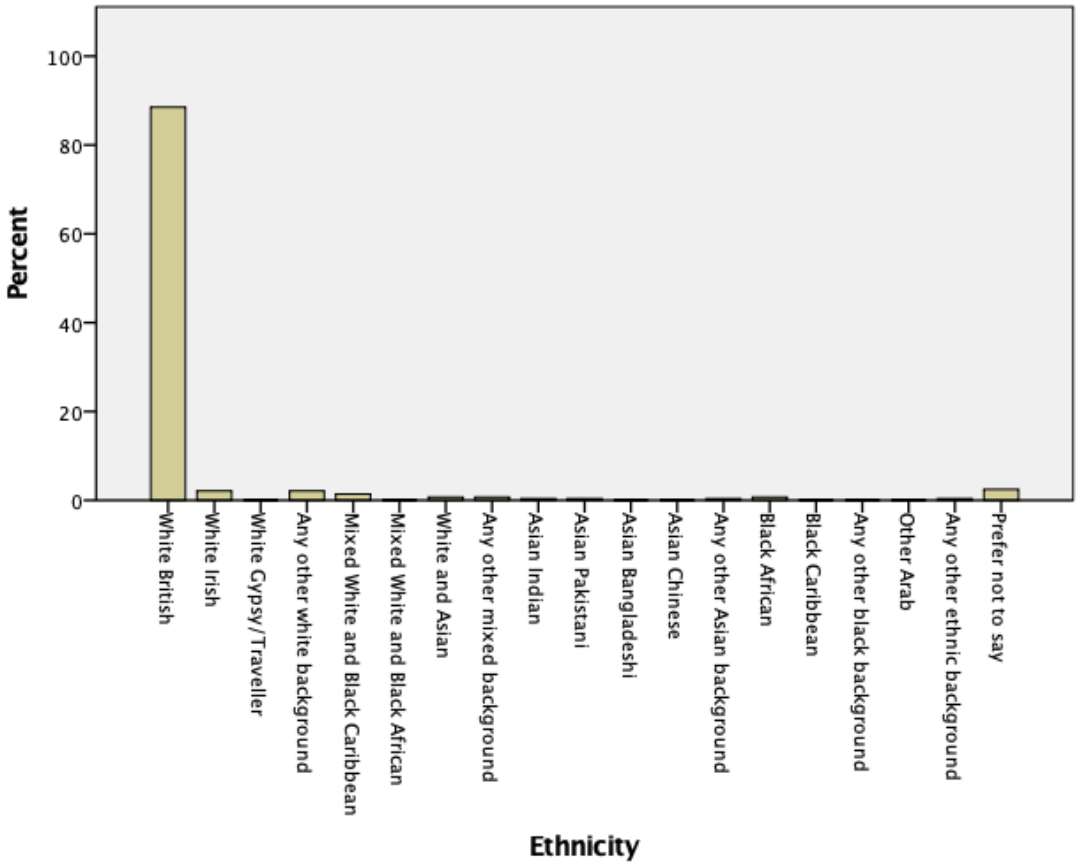
b. Cannot be computed because there is insufficient memory.

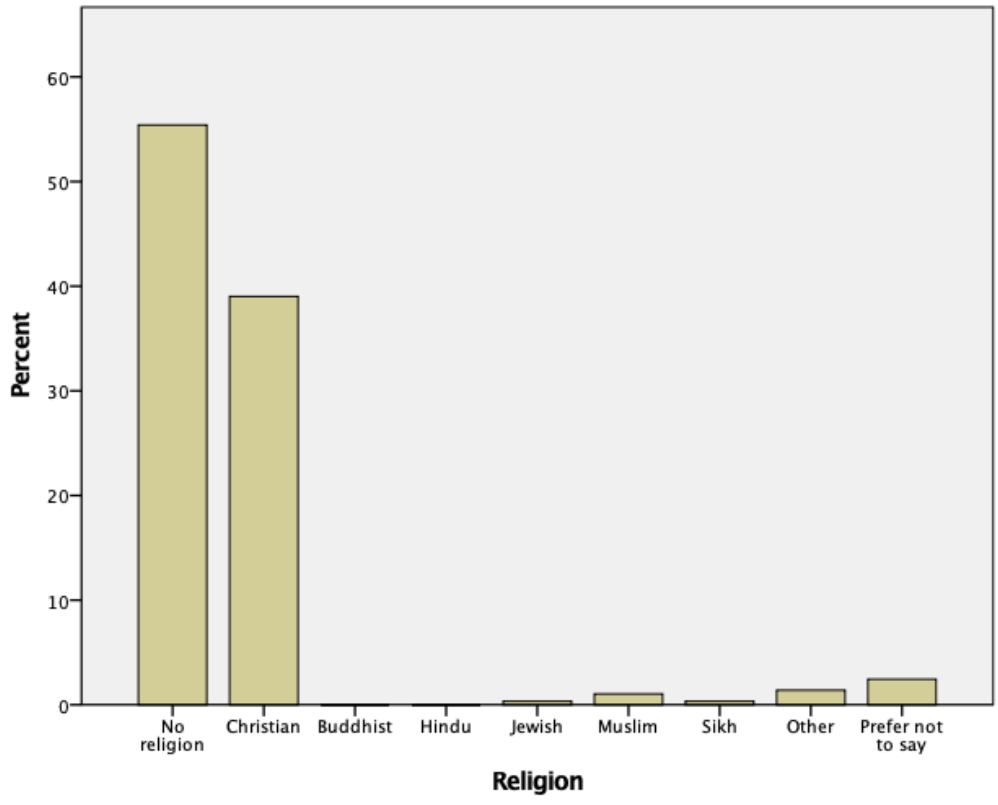
c. The standardized statistic is 1.806.

Symmetric Measures

		Value	Approximate Significance	Exact Significance
Nominal by Nominal	Phi	.226	.067	.068
	Cramer's V	.226	.067	.068
N of Valid Cases		287		

Appendix S – Frequency of sample responses to 'Ethnicity' and 'Religion'





Appendix T – Ethics Approval Letter

19th November 2018 Ref: 18/SAS/12C

Joe Simon
c/o School of Law, Criminal Justice and Computing
Faculty of Social & Applied Sciences

Dear Joe,

Confirmation of ethics compliance for your study – *'Perceptions of Authorised Firearms Officers: Barriers and Motivations to joining an Armed Policing Unit'*

I have received your Ethics Review Checklist and appropriate supporting documentation for proportionate review of the above project. Your application complies fully with the requirements for proportionate ethical review, as set out in this University's Research Ethics and Governance Procedures.

In confirming compliance for your study, I must remind you that it is your responsibility to follow, as appropriate, the policies and procedures set out in the *Research Governance Framework* (http://www.canterbury.ac.uk/research-and-consultancy/governance-and-ethics/governance-and-ethics.aspx) and any relevant academic or professional guidelines. This includes providing, if appropriate, information sheets and consent forms, and ensuring confidentiality in the storage and use of data.

Any significant change in the question, design or conduct of the study over its course should be notified via email to red.resgov@canterbury.ac.uk and may require a new application for ethics approval.

It is a condition of compliance that you **must** inform us once your research has completed.

Wishing you every success with your research.

Yours sincerely,

Penny

Penny Keogh
Research Integrity & Development Officer
Email: red.resgov@canterbury.ac.uk

CC Professor Robin Bryant

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Professor Rama Thirunamachandran, Vice Chancellor and Principal

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